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SOME CURRENT CONCEPTIONS OF RATIONALITY
AND THE POLICY SCIENCES

- by -

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C

A THESIS

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The undersigned certify that they have read, and
recommend to the Faculty of Graduate Studies for
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of Rationality and the Policy Sciences" submitted by
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ABSTRACT

The concept of rationality is central and important in sociology and in other policy sciences. A library research project was designed to examine theoretical and empirical works concerned with rationality, and to delineate their implications for some policy disciplines, especially criminology.

A prerequisite of sound science is the consistent use of precise definitions. Although 'nominal' definitions of rationality are ubiquitous, they have two major short-comings: first, there is little consensus as to their exact meaning and, because of the lack of empirical content, such consensus is unlikely to be achieved; and second, nominal definitions are often used as if they referred to empirical reality. A 'real' definition of rationality was constructed, based chiefly upon the writings of Pareto. Behavior was defined as rational if it was purposive, was directed toward empirical ends, was transitive and maximized utility, and was based upon information which indicated the most appropriate means for the achievement of ends. The definition was examined in terms of relevant data, and then used to analyze the basic tenents of social action theory and selected aspects of criminology.

The analysis led to several conclusions. It was found that the term rationality was often used simply as an honorific. Generally it was found to lack empirical support. There was scant data to inform us of the extent to which man's behavior was telic and/or directed towards empirical ends. Even where goals were empirical, men seldom attempted to measure goal attainment. The data examined indicated that transitivity was more likely for individuals than for groups, and that behavior maximizing goal attainment was seldom observed. Information levels about several important issues were found to be low, and what information was available was subject to distortion.

Social action theory was examined in the light of the above conclusions. Analysis revealed that several basic concepts lacked empirical support. In addition, the method of verstehen was found to have little scientific basis. The study of selected aspects of policy sciences revealed several problems. In criminology, it was found that rational social policy was impeded by several myths. These included the beliefs held by some criminologists that punishment does not generally act as a deterrent, and that the treatment of offenders (especially psychotherapy) was more effective than punitive methods for their reformation.

TABLE OF CONTENTS

Chapter		Page
One	INTRODUCTION	1
	The General Problem	1
	Justification for Study	1
	Methodological Approach	6
Two	DEFINITION OF RATIONALITY	10
	General Problems of Definition	10
	Some Definitions of Rationality	13
	Pareto's Definition	27
	Some Implications of Pareto's Definition	31
	Rationality and Related Concepts	36
	Summary	44
Three	THE REQUIREMENTS OF RATIONAL ACTION AND SOME IMPEDIMENTA	52
	The Consciousness Requirement	53
	The Empirical Requirement	54
	The Compatibility Requirement	56
	The Informational Dimension	68
	Summary and Conclusions	86
Four	SOME IMPLICATIONS OF RATIONALITY FOR SOCIAL ACTION THEORY	94
	Some Major Social Action Theorists	96
	A Critique of Action Theory	103

Five	CONSEQUENCES OF RATIONAL AND NON-RATIONAL ACTION	112
	The Traditional View: Rationality as Desirable	112
	An Alternative View	147
Six	SUMMARY AND CONCLUSIONS	171
	The Rationality Model	173
	Rationality and Normative Theory	177
	Rationality as a Value	180
	Conclusions	182
	BIBLIOGRAPHY	186
APPENDIX A:	Selective Definitions of the Term 'Rationality')	205
APPENDIX B:	Selective Definitions of the Term 'Rationalization'	211
APPENDIX C:	Selective Definitions of the Term 'Reason'	213
APPENDIX D:	Selective Definitions of the Term 'Reasonableness'	218

LIST OF TABLES

TABLE	PAGE
1 Theoretical Typologies	41

CHAPTER ONE

I N T R O D U C T I O N

I. The General Problem

The central concerns of this thesis are the meanings, uses and implications of the concept rationality. Background literature is synthesized into a comprehensive definition and assumptions concerning the conditions and extent of rational behavior are examined and compared with available empirical evidence. Finally, the significance of the idea of rationality is discussed with reference to sociology and other "policy sciences".

II. Justification of Its Study

A. Importance for Sociology

The concept of rationality is important for sociology because it is a basic assumption in the 'social action theory' which is predominant in American sociology.(1) If sociologists are to build upon the works of such men as Parsons, Znaniecki, MacIver, Mead and others, it seems advisable to consider the implications of the concept of rationality. Mannheim goes so far as to assert that "... the words 'rational' and 'irrational' ... are indispensable for sociological analysis."(2)

Rationality is not only an assumption of socio-logical theory, it is also a term of public currency. Sociologists are concerned with the explanations of behavior that people use in their daily life. Whether behavior is generally rational or not, the fact that a proportion of the scientific community and public expect 'men' to be rational, makes the incorporation of some working definition about rationality vital to an understanding of behavior. This is of particular importance when men translate their images of conduct into public policy in the control of unwanted conditions or conduct.

B. Interdisciplinary Significance

The concept of rationality is important in many social and policy sciences which are related to sociology. The value of the concept for any one discipline may be increased by the fact that it is held in common with many other disciplines. Concepts of mutual concern for two or more disciplines provide a kind of 'common-denominator' for those disciplines:

By showing that two or more branches of the social sciences are concerned with the same kinds of problems ... analysis may lead to important integrations of existing knowledge, and to significant prescriptions for future interdisciplinary efforts.(3)

As Lazarsfeld and Rosenberg point out, contributions to interdisciplinary work can aid the development of the social sciences. "Many scholars have expressed the hope that developments in the different social sciences could be more closely coordinated" (4)

One approach to such coordination is by pointing out the extent to which concepts like rationality, provide a common focus of interest, and lead to theories and data beyond the traditional boundaries of a parent discipline. This thesis does not presume to accomplish such a delineation.

C. Clarification of Concepts

A prerequisite of scientific methodology is the definition of terms in such a way that they may be used consistently by researchers. (5) According to Lazarsfeld, the clarification of terms is probably the oldest of the major themes with which a methodologist in the social sciences must be concerned. Lazarsfeld goes on to point out that:

Some of the most interesting of the recent publications came about when the authors ... found that they had to refine traditional definitions and reconcile contradictions within the same texts before they could use general ideas in specific inquiry. (6)

Zetterberg also stresses the necessity of clarifying terms and concepts. He notes that one of the chief limitations of many sociological terms is their frequent fusion of evaluative, descriptive, and prescriptive perspectives.(7)

The concept of rationality is in need of clarification. It has been used in a variety of ways by researchers in various disciplines. Not only do investigators fail to agree on a definition of the term rationality, but in some cases, students neglect to specify what the term refers to within the scope of their own work. Many features of rationality are referred to or implied and hypotheses and generalizations are formed, but the term remains vague and so introduces ambiguity into the complex problems of describing and analyzing the social world. Lazarsfeld point out that a clarification of terms is needed in: "The rapidly growing literature on the concept of ... 'rational choice.' "(8)

D. Rationality as a Value

The connotations of the term rationality are positive.(9)

... when we speak of human behaviour and the management of our affairs as 'rational,' we mean to commend it ... it belongs in our tradition to find 'rationality' a

laudable quality, or, at least, to find irrationality something ... to be avoided. (Rationality is) an idea which in relation to human conduct implies commendation.(10)

The fact that rationality is believed to be something desirable provides an additional reason for its study. The study of values is part of any study of social order, and social scientists are particularly interested in the study of rationality because 'being rational' is part of the scientific value-system to which many Westerners would adhere.

The scientists' evaluation of rationality also has implications for the selection of problems. Some social scientists use the concept of rationality to make judgments about what in society is problematic; that is, what conduct shall be called prejudiced, delusional, magical, ignorant, mythical, superstitious or pathological. They hold that, given the scientific method, which is held to exemplify the most successful use of rationality, we can discover the goals and needs of all mankind, define morality in terms of these, and devise or find the most appropriate means to achieve 'a rational society.' Such a view is found in the writings of Lundberg, Rapoport, and Kaplan.(11)

E. Summary

A study of the concept of rationality is of value for several reasons. First, the concept plays an important role in basic assumptions underlying sociological theory. Second, the idea of rationality provides a meeting place for sociology with other disciplines. Third, the definitions and uses of the concept are varied, inconsistent, and therefore in need of clarification. Finally, rationality is valued, both by the public and by scientists, and, consequently, assumptions about it are important to our understanding of the behavior of men who appeal to rationality as the grounds for their private and public decisions.

III. Methodological Approach

The concept of rationality will be viewed within the frame of reference of sociology. However, an attempt will be made to examine the uses of sociology as a policy science.

The study obviously must be limited in scope. Rationality has been a concern of philosophers for thousands of years, and innumerable sources might have some bearing upon the subject. The material included is hopefully representative of the material available. It does not

presume to be all-inclusive. The study is limited in time. Our concern therefore is mainly with recent studies and their antecedents, and only incidental reference is made to classical treatises. In addition, comments on those works that are included are limited in depth and therefore concern only the highlights and major issues, for a full explication of any one author could constitute a thesis in itself.

Our concern, then, is to summarize and analyze available theoretical and empirical studies: no attempt will be made here to present original empirical evidence testing the ideas suggested.

FOOTNOTES: CHAPTER ONE

1. "Sociologists seldom deny the irrational component in man's makeup. Indeed, some sociologists, such as Pareto, have given the problem of the irrational in man's behavior the central place in their scheme of analysis. By and large however, sociologists do not feel that man's irrationality is quite the obstacle to social life many suppose it to be. They stress society's capacity to prevent its manifestations, or through sanctions to control its effects. They emphasize man's persistent and purposeful pursuits of the social and personal goals which his culture and time define as appropriate. In this sense most human action is 'rational' and in the sociological view, were it not so men could hardly survive in nature." A. Inkeles, What is Sociology? (Englewood Cliffs: Prentice Hall, 1964), p. 50.

2. K. Mannheim, Man and Society in An Age of Reconstruction (London: Kegan Paul, Trench Trubner and Co., 1940), p. 52.

3. P. Lazarsfeld and M. Rosenberg, The Language of Social Research (Glencoe, Illinois: The Free Press, 1955), p. 10.

4. Ibid., p. 10.

5. R. O'Brien, C. Schrag, and W. Martin, Readings in General Sociology (Boston: Houghton, Mifflin, 1951), p. 3.

6. P. Lazarsfeld, "Problems in Methodology," in R. Merton (ed.) Sociology Today (New York: Basic Books, 1959), p. 41.

7. Ibid., p. 41.

8. Ibid., p. 41.

9. For example, Roget's College Thesaurus (Toronto: The New American Library, 1966) lists after 'rational' the words: "sound, sane, logical, sensible, reasonable."

10. M. Oakeshott, Rationalism in Politics (London: Methuen and Co., 1962), p. 80.

11. G. Lundberg, Can Science Save Us? (New York: David McKay Co., 1961); A. Rapoport, Science and the Goals

of Man (New York: Harper, 1950); A. Kaplan, The Conduct of Inquiry (San Francisco: Chandler Publishing Co., 1964). Also see R. Cantril, "Towards a Scientific Morality," Journal of Psychology 1949, 27, pp. 363-376. I. Chein, "Towards a Science of Morality," Journal of Psychology 1947, 25, pp. 235-238.

CHAPTER TWO

DEFINITION OF RATIONALITY

The purpose of this chapter is to define rationality, to defend this definition and discuss some of its implications. Some typologies based on the concept will be outlined and several illustrations of the numerous definitions will be presented. In order to accomplish this task, some of the problems of definition itself will be outlined. For the purposes of this thesis, it will be argued that a person is rational if he knows what he wants, if what he wants is an observable possibility, if he knows why his behavior will accomplish his goal, and if his behavior is 'worth it' -- that is, if it does not conflict significantly with his other goals and/or values. In other words, rationality is goal directed behavior where the goal is conscious and observable, and the means to the goal are the 'best' available.

I. General Problems of Definition

Some of the problems involved in the definition of rationality are directly related to the general problems of definition per se. One of the problems of definition is that once a word acquires a particular connotation, it

is frequently impossible to use the word in a way which contradicts or qualifies that meaning. Thus, one of the difficulties with the definition of the term rationality is its frequent association with words that have a positive connotation (as, for example, the 'rational good,' a 'rational science,' the 'rational community'). This frequent association of words has resulted in the idea that rationality is, ipso facto, a good thing. This association has been partly fostered by the failure to distinguish between 'real' and 'nominal' definitions.

A nominal definition (often called a verbal definition) is: "... a declaration of intention to use a certain word or phrase as a substitute for another word or phrase."(1) Two terms must be distinguished: the definiendum is the word or phrase which we wish to explain or understand; the definiens is the word or phrase which is substituted. Nominal definitions are distinguished by three important characteristics: first, the meaning of the definiendum is dependent upon that of the definiens, that is, the expression or concept defined has literally no other meaning than that given to it arbitrarily; second, because the definition is not a proposition, it can be neither true nor false; and third, because the definition is not a proposition, it cannot serve as a premise from

which to draw an inference. A nominal definition does not contribute to knowledge, but only indicates an intention to use language in a particular way.

Real definitions, as defined by Bierstedt, differ from nominal definitions in that they operate on the referential level as well as on the symbolic and linguistic levels. They are propositions announcing: " ... the conventional intension of a concept."(2) By 'intension' is meant the attributes of the things to which the word applies.(3) Real definitions have three important characteristics; first, they state that two expressions, each of which has an independent meaning, are equivalent to one another; second, they are propositions, that is, they make a claim to be true; and third, because they are propositions, they can serve as premises for inference. 'Real definitions' not only indicate the meaning of a word, as do nominal definitions, but they also assert something about the referent of the concept. They may be judged by their truth, as contrasted to nominal definitions which are judged by their utility.(4)

The history of the concept of rationality reveals a large number of nominal definitions (for examples, see Appendix A, numbers 2, 7, 8 and 11). The term rationality

has often been used to modify other concepts which have positive connotations of moral or ethical 'goodness.' As nominal definitions become familiar, there is a tendency to react to them as if they were real definitions. Thus, nominal definitions implying that to be human is to be rational have often come to be accepted as real definitions, without the appropriate empirical data to justify acceptance.(5) The problem of the balance of this chapter is to delineate the attributes of rationality necessary which must be included in a real definition of the concept.

II. Some Definitions of Rationality

The terms "rationality," "rationalization," "reason" and "reasonableness" have enjoyed a long history which has made their use a source of confusion. These terms have been used ambiguously and, in many instances, interchangeably. A particularly unclear passage in Popper's Conjectures and Refutations shows such confusion.(6) Within the scope of only two pages, Popper uses the terms "rationalism," "reasonable," "rationalist," "rationalistic," as though they were synonymous. At one point, he uses the term "reasonable attitude" synonymously with the term "rationalistic attitude" and equates both with the attitude of non-violence. At another point, the concept of "reasonableness" is defined as an attitude of "give and

take." A third time, he uses the term "rationalism" to oppose the notion of violence, and in a fourth context, reveals his view of the term "rational" as implying the best use of the available means in order to achieve a certain end.

Passages which misuse the terms seem to be more frequent than passages which delineate clear and consistent usage. Even in the works of Weber and Mannheim, where the concept of rationality is a dominant theme, its meanings are obscure. As Zollschan and Gibeau comment regarding Weber's writing:

The terms Zweckrationalitaet and Wertrationalitaet, in particular, exhibit such a syncretism of possible meanings as to make them fair game for any social scientist who desires to be learnedly obscure.(7)

Mannheim's definitions of rationality are equally vague, partly because they "... are derived with slight modifications from Max Weber."(8) Mannheim distinguishes between substantial and functional rationality as follows. Substantial rationality is "... an act of thought which reveals intelligent insight into the interrelations of events in a given situation."(9) Mannheim is not consistent in his usage of the term substantially rational, and where he does use it as defined above, it

constitutes only a nominal definition.(10)

The term "functionally rational" is used by Mannheim to refer to action which meets two criteria:

"(a) functional organization with reference to a definite goal; and (b) a consequent calculability when viewed from the standpoint of an observer or a third person seeking to adjust himself to it."(11)

The above definition suffers from several limitations, only one of which will be dealt with here. A central inadequacy is the ambiguity of the term 'definite.' Mannheim makes no effort to tell us what he means by this word. If he means that the goals are empirical, then he contradicts himself in one of the examples he cites:

One may strive to attain an irrational eschatological goal, such as salvation, by so organizing one's ascetic behaviour that it will lead to this goal or, at any rate, to a state of irrational ecstacy. Nevertheless, we should call this behaviour rational because it is organized, since every action has a functional role to play in achieving the ultimate aim.(12)

If Mannheim's use of the term 'definite' accords with the dictionary sense of "having distinct or certain limits" or "being clear and unmistakable in meaning,"(13) then it could refer equally well to non-empirical goals. The problem of the rationality of non-empirical goals will be examined in

subsequent section.

In conclusion the definitions of rationality proposed by Weber and by Mannheim leave a great deal to be desired. For the purposes of this thesis, these definitions are too ambiguous.

Appendices A to D contain a selection of definitions indicating the many ways authors have used the terms rationality, rationalization, reason, and reasonableness. In this chapter we will look at some such definitions, as an illustration of the proliferation of meanings of the term rationality. Their presentation does not constitute a defence of their uses, nor will the definitions be criticized. There are two reasons why critical analysis has been set aside. First, criticism often constitutes the pointing out of inconsistencies and ambiguities in definitions, and this has been partially done above. Second, critical analysis often results in logomachy, an approach which tends to be unfruitful with nominal definitions which are not open to dispute. The definitions are presented by organizing them according to the characteristics which they emphasize; the list is not exhaustive, and there is some overlapping.

A. Categorizing and Comparing

Rationality often refers to the frequency with which a person searches his experience for a situation comparable to the one he is confronting, or, describes the extent to which a person is concerned with making situations comparable. One who addresses a task by making comparisons may be said to be treating the problem situation as an instance of a type. The degree to which a person is concerned with this process of classification, the frequency with which the process occurs, and the degree of success that one has with these attempts at classification are all factors which result in one person's behaviour being called more rational than another's. Ayer, implies that being rational consists of the search for comparable situations in one's past. He says "... being rational entails being guided in a particular way by past experience." (14) Rickert's definition of rationality emphasizes the process of classification:

...which proceeds by remolding the phenomenon (of reality), which is to say simplifying them and transforming the heterogeneous continuum of reality into either a homogeneous continuum or a heterogeneous discretum ... (15)

B. Tolerable Error

Individuals vary in the extent to which they insist that their theories 'fit' their observations and conform to the terms by which they name, describe, and measure reality. Some authors hold that the more an individual is concerned with the 'fit' between his theories of reality and his observations, the more rational he is. Garfinkel has outlined this use of the term rationality. (16)

C. Search for Efficient Means

When an individual approaches a problem by seeking the rules which in similar situations have had a high success rate in producing the results desired, that person is often said to be acting rationally. Sometimes the term rational refers to the frequency with which the individual is engaged in such behavior; sometimes it simply implies the individual's inclination towards such behavior and/or his ability to perform adequately. An example of this view is found in the works of von Neuman and Morgenstern. (17) (also see Appendix A, #2)

D. Certain Kinds of Feelings

Rational conduct often implies the presence of certain kinds of feelings. Actions characterized by

'objectivity,' or the 'absence of personal bias' are more apt to be called rational than actions which are based upon subjective views. Emotional states considered to be conducive to rationality include the unprejudiced, the disinterested, and the impersonal. This view is found expressed in Mannheim's discussion of substantial irrationality.(18)

E. Intelligibility

A rational act is sometimes held to be one which is intelligible or understandable. The 'reasons' or motivations for the act 'make sense.'

A second basis for considering an act rational lies in the degree to which an individual understands the interrelations of events. The more one shows awareness and an ability to act effectively in a given situation, the more rational he is said to be. (see Appendix A, #11 & 14)

F. Analysis of Alternatives and Consequences

Rational action is sometimes felt to involve consideration by the actor of various behaviors and his anticipation of the consequences of alternatives. The time, care, and attention involved in this analysis and the 'rehearsal' in the imagination, the elaborateness and

the extent of the detail involved, the number of alternatives considered, and the extent and validity of the information used, are factors frequently considered relevant in determining the extent to which a particular action (or decision for action) is rational. This view is discussed by Schuetz who notes that some authors refer to rationality as 'acting deliberately.'

Schuetz outlines several types of deliberate action: that action which includes the application of measures proven successful in the past, the ability to anticipate consequences, and the use of rehearsal in imagination.(19)

G. Maximization of Utility

At least two models of rational choice are derived from mathematical theories of decision making. In these models, the criterion of rationality is the maximization of utility. The first type involves decisions under risk. Information is supplied concerning the expected utility of each contemplated course of action and the probability of achieving different outcomes. The decision to perform an action qualifies as rational if the expected utility is "maximal," in the sense that it is not exceeded by the expected utility of any other course of action.

The second model describes decisions under uncertainty. Information is supplied concerning the available courses of action, and their possible outcomes, but the probabilities of achieving those outcomes are not given. The decision is rational if it meets either of two criteria. The first of these is the maximin rule, which states that rational choice is the selection of the alternative whose worst possible outcome is at least as good as the worst possible outcome from any alternative. The second criterion, the maximax rule, states the more optimistic outlook that rational choice consists of the selection of the alternative whose best possible outcome is at least as good as the best possible outcome of any other alternative. (20)

H. Anticipation of the Future

Some writers believe rationality is the way an actor copes with the problem of scheduling events in order to achieve a goal. Two factors are involved. First, an individual who can specify a series of short-term goals, in order to attain a desired long-term goal, is held to be more rational than an individual who can formulate a long-term goal but does not concern himself with planning intermediate steps. Second, an individual who is able to order

his short-term goals in an appropriate sequence, is held to be more rational than an individual who can visualize short-term goals, but who does not concern himself with order in time. (21)

I. Predictability

Rationality has sometimes meant the ability to predict situations, either by searching for information that will reveal their regularities, or by analyzing the logic used to explain the situations. To make predictions it is necessary to take steps to avoid unanticipated and/or undesired consequences. An individual who acts in such a manner is considered by Merton to be more rational than one who does not take these necessary steps. (22)

J. Strategy

In The Theory of Games and Economic Behaviour, von Neuman and Morgenstern note that an individual may specify the necessary and sufficient conditions of his choice of a particular alternative. The specified set of possible alternative plans of action is called the "player's strategy." An individual whose strategy is characterized by the belief that his circumstances in the future will be like those in the past, is less rational than an individual who has an alternative strategy in case circumstances change. (23)

K. Rules of Procedure

Garfinkel distinguishes between two sets of rules of inference and procedure which are used by individuals and groups to determine the correctness of judgments, perceptions, and actions, and to differentiate among facts, suppositions, evidences, conjectures, and illusions. The term rationality is frequently used to refer to "Cartesian" rules state that decisions are made without regard to social affiliation; the decision is correct if it is one that could be made by "any man," and if the rules were followed regardless of other persons. In contrast, the "rules of the tribe" allow decisions on the basis of the social affiliations, whether or not the decision is considered acceptable depends upon the viewpoint of the socially important group with which agreement is sought.

Garfinkel states that "Cartesian" rules are held to be more rational than "tribal rules." They impose fewer limitations on decision making, and are thought to remove some of the social constraints which may interfere with (and/or render ineffective and irrelevant) the rational decision process. (24)

L. Choice

One popular meaning of the term rationality is that an actor is aware of the possibility of making a choice. For some authors, the definition of rationality extends to the actual making of the choice. Gould and Kolb note that "Rationality sometimes refers to processes of choice that employ the intellective faculty: sometimes to the choices themselves." (25)

M. Grounds of Choice

Some authors feel, that to assess the rationality of an individual's actions, it is necessary to examine the grounds to which he appeals in making his choice. Several meanings of the term 'grounds' need to be differentiated.

1. Rational grounds may refer exclusively to scientific knowledge; this requires that all statements can be tested by reference to evidence which must be available to observers, but which is independent of them. Lewis and Lopreato in their definition of arationality imply this definition of rationality, " ... arational behavior is single-ended action in which, from a scientific point of view, means are totally inappropriate for an intended end." (26)

2. Rational grounds may refer to the quality of an individual's cognitive framework; that is, the extent to which he codifies, and organizes his knowledge into a logical and comprehensive system. Two individuals may possess the same amount of factual knowledge, however, if one organizes that knowledge into universal empirical laws, and the other organizes it into sets of unique experiences the former is considered to be more rational. (27)

3. Rational grounds may also mean retrospective rationalizations. They may be discovered only when the actor interprets the action in such a way as to present a publically acceptable and coherent account of it. (28)

N. Compatibility of Means-Ends Relationships

Rationality has been used to mean the extent to which an individual follows the principles of formal logic and the rules of scientific procedure in problem solution. The most important of these rules is the 'rule of empirically adequate means.' In accordance with this rule, the 'means' taken by an individual to solve a problem must be empirical, that is, the means must be observable and can be corroborated by other qualified observers. In addition, the means must 'work,' that is, they must in

fact achieve the goal. The individuals' actions are then reviewed by a researcher to determine the degree to which the actions follow the rule. The use of such rules, the frequency with which they are employed, the insistence that all problems be approached in this manner, and the success an individual has in using this method, are considered as criteria of the rationality of an action. A representative view of this definition is found in the work of Smith. (29)

O. Semantic Clarity

Some people are of the opinion, that, in order to explain a situation, it is first necessary to achieve (or at least strive for) semantic clarity. Those persons who withhold credence until a situation has been accurately explained are sometimes held to be more rational than those persons who believe in or accept an ill-defined and somewhat mysterious situation. (30)

Some people assign a high priority to the tasks of clarifying the terms that explain a situation, and of deciding how compatible these are with the terms that others employ. A person who pays considerable attention to these tasks is considered more rational than one who tends to ignore them. (31)

P. Compatibility of Explanations with Scientific Knowledge

In the opinion of many authors, a rational person will be willing to examine what 'facts' he possesses and compare them with scientific facts. Second, he will be reasonable -- that is, prepared to change his 'facts' so that they conform to the facts of science. (32)

Although the above list of popular definitions of rationality is not exhaustive, it does serve to illustrate the large number of ways the idea has been used. The first twelve definitions discussed seem more likely to be propounded by non-scientific authors or by the lay public, while the last four seem more likely to be endorsed by scientifically oriented authors. Presentation of these definitions does not constitute their endorsement. It is now our task to propose a defensible definition.

III. Pareto's Definition

Among the various conceptions of rationality, Pareto's definition has been one of the most widely employed. His division of action into the categories of logical, non-logical, and illogical has given the sociological

analyst a useful tool. Levy states that the use of these categories "... or some similar to them (the term rational is often substituted for logical) is commonplace now whenever the means-end schema figures predominantly in the analysis of social action." (33)

Pareto's criteria for rational action are three. First: "the action must be motivated by a conscious goal." (34) This means that the action must not only be telic, but its objective must be recognized. This criterion rules out whether or not the unconscious is more or less rational than the conscious. Actions directed toward 'unconscious goals' do not fall within the scope of Pareto's definition. In short, one must 'know what he is seeking.' Second: "the goal must be humanly possible." (35) This means that goals must be observable; not transcendental. "The objective end is a real one." (36) Third: "The means taken toward reaching the goal must be the most appropriate and suitable means." (37)

There are actions that use means appropriate to ends and which logically link means with ends. There are other actions in which those traits are missing. The two sorts of conduct are very different according as they are considered under their objective or subjective aspects. (38)

As the foregoing quotation indicates, rational

action must exhibit a 'logical linkage' between the ends and the means. This implies that the ends and the means are efficiently related in the minds of both the actor and the observer.

Pareto suggests that a social phenomenon may be viewed in two ways: "as in reality and as it presents itself to the mind of this or that human being." (39) In the former instance a social phenomenon is considered objective.

Pareto also recognizes the relative nature of knowledge. He states: "We must not be misled by the names we give to the two classes. In reality, both are subjective, for all human knowledge is subjective." (40) He distinguishes the objective category from the subjective one " ... not so much by any differences in nature ... " but in terms of " ... the greater or lesser fund of factual knowledge that we ourselves have." (41)

In the subjective view, nearly all human action is considered logical. Pareto argues, however, that by his definition, the rationality of an act must be judged not only from one's private, subjective viewpoint but in the light of the 'most extensive knowledge,' which is a body of facts resulting from the logical-experimental process.

Since Pareto views the logical-experimental process as the essence of science, by implication the 'most extensive knowledge' is scientific knowledge. Other exponents of rationality (such as Parsons and Levy) also appeal to science as the legitimate criterion for judging the appropriateness of means to the achievement of ends.

Pareto's scheme places emphasis upon the means-ends relationship, and his analysis indicates that there must be a 'logical linkage' between the means and the ends in the minds of both the actor and the observer. However, Pareto's discussion of rationality focuses upon the distinction between the end as seen by the actor, and the end as seen by the observer. His famous classification of actions concentrates on the conjunction or disjunction of ends in the minds of the actor and the observer. (42)

Acceptance of Pareto's definition of rationality is extensive. Black has indicated Parson's support of the definition. (43) It has also been employed by such men as Nettler, (44) Deising, (45) Levy, (46) Smith, (47) Lewis and Lopreato (48) and Hempel (49). The definition is sufficiently familiar that Levy optimistically suggests: "Pareto's use of these three categories is familiar to virtually all students in the field today." (50) We shall

now consider some implications of this definition.

IV. Some Implications of Pareto's Definition

A. Rationality and the Empirical

The term, 'empirical,' is used in this thesis to describe events which are publicly observable, that is, experience which in principle is open to corroboration by 'qualified' observers. Ideally, the process of observation takes place in carefully controlled situations which makes the responses and the reporting of responses 'objective.' An objective statement about an event is made in such a way that 'qualified' observers who witness the event agree with the statement. Statements of this kind are held to be 'true' descriptions of the event and are called 'facts.' For the remainder of this thesis, the above definitions will be used. In addition, the term information will be used to designate knowledge consisting of statements which are facts.

The criterion of 'empirical' may present several problems. A goal which appears to be empirical may, for practical purposes, be non-empirical because it proves impossible to measure, to tell 'when you get there.' This does not mean that the goal is actually non-empirical, it simply means that some goals, like 'happiness' or 'mental health'

may be too complex to be measured. These goals are regarded as empirical until attempts are made to measure them. For example, although the terms "mental health" and "mental illness" appear to refer to empirical descriptions, social scientists are unable to agree on the characteristics of these states. In addition, they cannot agree upon a test to determine if "mental health" has been achieved through efforts to 'cure' individuals. An apparently empirical goal, such as 'cure' by psychotherapy, may turn out to be something which is difficult to measure. The discussion of the complexity of empirical goals as outlined above is not a criticism of Pareto per se, but merely serves to point out a difficult problem in social sciences.

B. Rationality and Purposiveness

Pareto defines rational action as 'purposive,' that is, consciously goal-directed. Some psychologists and psychiatrists have proposed that the unconscious may also be rational.(51) Watkins, for example, argues that rationality defined as "... the deliberate and logical choice of means to attain ends, in the light of existing knowledge ..." is an inadequate definition because there is considerable behavior which does not conform to the means-end pattern.(52) Watkins find Pareto's definition

too restrictive because so much behavior is non-telic and he suggests that the term 'rational' be extended to include two additional types of action. He would call behavior rational if the 'full knowledge of consequences' would lead to the same course of action.

... a person has behaved rationally if he would have behaved in the same way if, with the same factual information, he had seen the full logical implications of his behaviour, whether he actually saw them or not. (53)

Watkins would also accept as 'rational,' action which is unconscious, providing that the consequences are the same as those of conscious rational acts. (54) For Watkins, then, behavior which has the same consequences as rational behavior may be included within the rubric of rationality. The difficulty with this approach is that phenomena such as accident, coincidence, and ignorance may be called rational if individuals happen to attain goals without knowing how or why. Watkins focuses upon the phenomena, noted by Pareto, whereby subjectively non-rational acts may coincidentally appear to have a "marvelous" objective rationality. (55)

The inclusion of unconscious processes within the rubric of rationality poses problems for observation, measurement, and verification. When the 'unconscious' is defined in such a way that it does not have an empirical

referent, its rationality or non-rationality can never be adequately tested. The most fruitful approach, therefore, seems to be to agree with Pareto: if the phrase rational action is to be meaningful, it must refer to action which is purposive, in the sense of being conscious and observable.

C. Rationality and Appropriateness
of Means

Pareto's definition of rational action states that the means taken to achieve the ends must be the most appropriate ones. Although he does not specify what he means by the term 'appropriate,' the customary usage leads one to assume that Pareto regards means as 'appropriate' when they do in fact work and lead to the achievement of the goal.

In some cases, there is more than one means by which the actor can efficiently achieve his goal. According to Pareto, if the actor is rational, he will choose the most appropriate (efficacious) of these means. Gibson concurs with Pareto when he states " ... there may be various alternative ways of achieving an end. To act rationally ... is to select what on the evidence is the best way of achieving it"(56) However, neither Pareto nor Gibson indicate how the most appropriate course can be determined. Pareto does imply that the determination of the most appropriate

means involves the use of the logical-experimental (or scientific) method. However, such a position is shown to be over-simplified when one considers the many criteria by which appropriateness may be judged. For example, each of the appropriate means may be attended by different incidental consequences. Some of these consequences may be desirable, while others may be deleterious in that they tend to interfere with the attainment of other goals. We suggest that the most appropriate means is that which achieves the goal and is attended by the greatest number of desirable consequences.

One solution to the problem of which means is the most appropriate is offered by mathematical theory. In decision theory, the most appropriate means is that which leads to the maximization of utility, by either the maximal or the maximin rule.(57) The problem with using mathematical models is that they are not generally applicable to the difficult and complex decisions of daily life because men rarely have the required data about the available courses of action, their probabilities and utilities.

The assertion that a particular means is most appropriate to the attainment of a goal is always potentially debatable. The problem of determining "appropriateness" however, is further complicated in that many fail to offer

a test by which it can be determined whether or not the criteria for appropriateness have in fact been met.

V. Rationality and Related Concepts

The definition and description of rational action deals with only a part of behavior. Theorists such as Weber, Pareto, Schneider, and Levy, who have concerned themselves with rationality have also classified behavior which does not conform to the rational model. The formulation of categories to describe and explain behavior has lead to the distinction between rational, irrational and/or non-rational action.

Weber defines rational action as an ideal type and then develops a typology in terms of deviations from this constructed type. According to Parsons, Weber tends to think "... in terms of the dichotomy of rational and irrational." (58) Thus, Weber states, "... it is possible to introduce the irrational components as accounting for the observed deviations from this hypothetical course." (59) He argues that by comparing the ideal type of rational action with real action, it is possible to understand how behavior is influenced by irrational factors. (60)

Pareto classifies all behavior which does not

meet his definition of rational as non-rational. He differentiates between irrationality and non-rationality by saying that irrationality is one type of non-rationality. Although he states clearly that "... the non-rational is by no means the same as the irrational ..." he does not specify the differences between them.(61) Pareto tends to ignore the idea of irrationality, and to avoid the use of the term.(62)

According to Pareto, most human behavior is non-rational. The sources of such action are psychic states, sentiments, and the unconscious. Behavior based upon instincts in animals, or upon tradition in humans, he also categorizes as non-rational, while recognizing that both instinctive and traditional behavior may coincide with rational action. Thus, the "subjectively non-rational" acts of insects may show a "marvelous objective logic" in that they accomplish sustaining or valuable results.(63) The action functions to the advantage of the agent without that advantage having been intended. Thus unanticipated consequences which are 'good' are just as non-rational as those which are undesired.

Almost all of the first volume of Pareto's Mind and Society is devoted to examples of non-rational behavior.(64) The discussion focuses upon such phenomena as magic, acts

based upon general rules (such as moralities and laws), and acts based upon tradition. It should be pointed out that traditional is not necessarily non-rational, but may be rational acts that have been repeated over a period of time. In some cases, however, action that conforms to tradition is based upon the simple dictum that behavior should follow a certain pattern because it has always followed that pattern.

Schneider conceives of irrational action as resulting from "...the intrusion of an 'alien' element, ... the existence of a 'distortion' in behaviour." (65) The sources may be either traditional or emotional. For Schneider, the proof of the existence of irrationality depends upon the demonstration of the incompatibility of an action with the attainment of goals which are important to the individual.

Schneider outlines a second kind of irrational behavior. Following the traditions of Freud and Merton, he distinguishes between manifest and latent consequences. (66) The term manifest refers to consequences which are recognized and intended; the term latent refers to consequences which are not recognized or intended. Conflict between these manifest and latent consequences is one kind of irrationality.

Schneider uses the term non-rational to refer to behavior which is directed towards rationality, but because of simple ignorance or error, does not achieve the goals. This is distinguished from behavior which fails because of systematic distortion or a conflict of latent and manifest consequences. Such behavior is irrational. (67)

Levy extends the Paretian schema to a considerable degree. Like Pareto, he defines non-rational action as all action which does not meet the criteria of rational action. He then distinguishes between two types of non-rational action: the irrational and the arational.

Irrational action occurs when the subjective ends as viewed by an individual do not coincide with the objective ends of the action (as viewed by an outside observer). The primary sources of such irrational action are ignorance and error. The existence of irrational action is demonstrated when it can be shown that an actor's choice of means is inadequate to achieve his ends.

Arational action is all non-rational action which is not irrational. Levy distinguishes between two types of arational action. Methodologically arational action occurs when the end is empirical, but where the means are, at least in part, non-empirical. Magic is an

example of methodologically arational action. Ultimately arational action occurs when both the ends and the means of an action are, at least in part, non-empirical. An example of ultimately arational action is religious behavior oriented towards the salvation of souls. The various typologies of action which have been proposed to differentiate rational action from other kinds of action are summarized in Table 1.

VI: Rationality and the Means-Ends Continuum

The concept of rationality assumes that there is a useful distinction between the concepts of means and ends. If we cannot make this assumption, the entire analysis appears to be in difficulty. For purposes of this thesis, we assume that the relations between means and ends can be established without commitment either to the means or the ends. Critics have attacked this assumption saying that it supposes that value is attached only to ends and not to means.(68) They argue that, even in what appear to be purely factual statements about means-ends relations, values are involved.(69) Kaplan notes that "... all ends are means to further ends; a value is inherent only relative to something else serving as an instrumentality, but in itself it leads us on to further ends."(70) Kaplan

TABLE 1
THEORETICAL TYPOLOGIES OF ACTION

Theorist	Typology	Source
Max Weber (1864-1920)	<u>rational</u> <u>zweckrational</u> (rationally purposive) <u>wertrational</u> (rational in terms of values) <u>irrational</u> <u>affective</u> <u>traditional</u>	<u>The Theory of Social and Economic Organization</u> pp. 83-84 and p. 104
Vilfredo Pareto (1848-1923)	<u>rational</u> <u>non-rational</u> <u>irrational</u>	<u>The Mind and Society</u> v.1, pp. 75-170
Louis Schneider (1915-)	<u>rational</u> <u>non-rational</u> <u>irrational</u> <u>distortion</u> <u>conflict of latent and manifest ends</u>	<u>The Freudian Psychology and Veblen's Social Theory</u> pp. 14-17
Marion Levy, Jr. (1918-)	<u>rational</u> <u>non-rational</u> <u>irrational</u> <u>arational</u> <u>methodologically arational</u> <u>ultimately arational</u>	<u>The Structure of Society</u> pp. 242-244

goes on to argue that ends are " ... appraised in terms of the means they call for ..." and that one of the common mistakes in the application of behavioral science to social policy is the " ... supposition that ends can be isolated and used for the appraisal of means without themselves being subject to appraisal by other ends" (71)

Kaplan's argument seems vulnerable on at least three counts. In the first place, such ambiguous and undefined terms as "appraise" make the argument difficult to interpret. Second, if we are to "appraise" means by other ends, then does this not raise the question of "appraising," in turn, those ends by further ends and/or means? If Kaplan's argument is taken seriously, it leads us into the trap of infinite regression. Third, Nagel has indicated that authors who argue as Kaplan does, confound several meanings of the term "value."

The problem of the means-ends schema is further illustrated in the debate between Fuller and Nagel. (73) Fuller states that when interpretations of purposive behavior are made, fact and value merge. (74) Fuller's position has been extensively criticized by Nagel on three grounds: his use of the term "value judgment" is inconsistent; his argument is tautological; (75) the hypothetical cases presented as illustrations are antithetical to actual judicial cases. (76) Fuller's viewpoint suffers

from other limitations. He appears to commit the ad hominem fallacy in blaming his failure to understand Nagel's argument on the grounds that Nagel refuses to state why he argues as he does. Fuller states:

... it still remains true that his failure to take a clear position with respect to any ethical theory other than that of natural law makes it difficult to discern the vantage point from which he dispatches his critical shafts. (77)

In developing his case, Fuller states that the "collective articulation of shared purposes" leads to better understanding of ends and the ability to discern means to these ends. (78) This argument may be criticized in two ways. First, it is a non sequitur, for it does not logically follow that communication leads to understanding. Second, even if the argument were granted, Fuller's assumption that the consequences of understanding are positive is optimistic, as will be shown in Chapter Five. His position is made even more tenuous by his advocacy of "vicarious participation" as a method of evaluation. This method is subject to several limitations, which will be discussed in detail in Chapter Four. Finally, he appears to miss the difference between real and nominal definitions. (79)

VII. Summary

The purpose of this chapter was to offer a definition of rationality, as it will be used throughout this thesis. The foregoing discussion constitutes an elaboration and a defense of this definition. The definition in summary is:

By the phrase rational act we mean any act that meets Pareto's criteria, namely, that it be directed toward a consciously held empirical goal where the means to that goal are the most appropriate. The phrase 'most appropriate' applies to means that - 1) are chosen on the basis of information, 2) are chosen consciously, and 3) that maximally realize the goal, while minimally damaging other goals.

Hereafter, the term rationality refers to behavior that is composed of rational acts. The term is synonymous with the phrases rational action and rational conduct. For the sake of simplicity, all action which is not rational will be called non-rational, in the tradition of Pareto and Levy. By the infinitive to be rational, we mean 'to perform rational acts.' It is to be differentiated from the capacity to be rational or from the intention to be rational.

A definition of rationality has been proposed, and a defense of this definition is based upon the following points:

- a) The definition is a 'real' one, that is, the author has set out the characteristics of behavior which are essential in order for it to be called rational. Because the definition is 'real,' it can serve as a premise for inference, and is a basis of testable propositions.
- b) The concepts in the definition are clear and distinct.
- c) The definition uses concepts which are scientifically verifiable. For example, 'information' and 'awareness' are open to observation, and can therefore be subjected to measurement and testing.
- d) The definition has heuristic value for sociology. In discussing Pareto's definition, Schuetz states: "This definition gives an excellent resume of the widely used concept of rational action insofar as it refers to the level of sociological theory." (80)
- e) The definition has been widely utilized. Although popular definitions are not necessarily 'good'

ones, agreement on definitions is an excellent starting point for research.

f) Finally, the proposed definition carries no value judgment concerning the desirability or undesirability of rationality. It is neutral, and involves a minimum of personal or group bias.

FOOTNOTES: CHAPTER TWO

1. R. Bierstedt, "Nominal and Real Definitions in Sociological Theory," in L. Gross (ed.), Symposium on Sociological Theory (New York: Harper and Row, 1959), p.138. Bierstedt's definition conflicts with other definitions in use in sociology. For example, see A. Pierce, "Empiricism and the Social Sciences," American Sociological Review, 21 (1956), pp. 135-137. Pierce argues that a definition cannot be a proposition while Bierstedt contends that real definitions may be.
2. Ibid., p. 139.
3. W. Salmon, Logic (Englewood Cliffs: Prentice-Hall, 1963), pp. 89-91.
4. R. Bierstedt, op. cit., pp. 121-143.
5. W. Salmon, op. cit., p. 95.
6. K. Popper, Conjectures and Refutations (New York: Basic Books, 1962), pp. 356-357.
7. G. Zollschan and P. Gibeau, "Concerning Alienation: A system of Categories for the Exploration of Rational and Irrational Behaviour," in G. Zollschan and W. Firsch, (eds.), Explorations in Social Change (New York: Houghton Mifflin Co., 1964), p. 164.
8. P. Diesing, Reason in Society: Five Types of Decisions and Their Social Conditions (Urbana: University of Illinois Press, 1962), p. 3.
9. K. Mannheim, Man and Society in an Age of Reconstruction (London: Routledge and Kegan Paul, 1952), p.53.
10. K. Wolff, "The Sociology of Knowledge and Sociological Theory," in L. Gross (ed.), Symposium on Sociological Theory (New York: Harper and Row, 1959), p. 586.
11. K. Mannheim, op.cit., p. 53.
12. Ibid., p. 53.
13. C. Barnhart (ed.), The American College Dictionary (New York: Random House, 1964).
14. A. Ayer, as cited by B. Blanshard, Reason and Analysis (London: George Allen and Unwin, 1962), p.25.

15. H. Rickert, as cited by F. Kolegar, "The Concept of Rationalization and Cultural Pessimism in Max Weber's Sociology," The Sociological Quarterly, 5 (1954), p. 359.
16. H. Garfinkel, "The Rational Properties of Scientific and Common Sense Activities," in N. Washburne (ed.), Decisions, Values and Groups Volume II (New York: Macmillan, 1962), p. 304.
17. J. von Neumann and O. Morgenstern, Theory of Games and Economic Behaviour (Princeton, New Jersey: Princeton University Press, 1947). It is interesting to note that the 'search for means' dimension comes to exactly the opposite conclusion as the 'strategy' dimension. One postulates that rational behavior involves the utilization of past experience, while the other postulates that it involves the rejection of past experience and the anticipation of changes, rather than consistencies, in experience.
18. K. Mannheim, op.cit., p. 58.
19. A. Schuetz, "The Problem of Rationality in the Social World," Economica, 10 (1964), p. 131.
20. C. Hempel, Aspects of Scientific Explanation (New York: The Free Press, 1965), pp. 466-467.
21. H. Garfinkel, op.cit., p. 307.
22. R. Merton, "The Unanticipated Consequences of Purposive Social Action," American Sociological Review, 1 (1936), p. 896.
23. J. von Neuman and O. Morgenstern, op.cit., p. 34.
24. H. Garfinkel, op.cit., p. 309.
25. J. Gould and W. Kolb (eds.), A Dictionary of the Social Sciences (Glencoe, Illinois: The Free Press, 1964), p. 574.
26. L. Lewis and J. Lopreato, "Arationality, Ignorance and the Perceived Danger in Medical Practices," American Sociological Review, 27 (1962), p. 508.
27. C. Hempel, op.cit., pp. 469, 472.
28. M. Oakeshott, Rationalism in Politics (London: Methuen and Co., 1962), p. 103.

29. M. Smith, "Rationality and the Social Process," Journal of Individual Psychology, 16 (1960), p. 33.
30. Ibid., p. 32.
31. R. Handy and P. Kurtz, A Current Appraisal of the Behavioural Sciences (Great Barrington, Mass. Behavioral Research Council, 1964), pp. 99-114; and G. Nettler, "Review of A. Rapport's 'Science and the Goals of Man,'" Journal of General Psychology, 43 (1960), pp. 159-161.
32. M. Levy, The Structure of Society (Princeton: Princeton University Press, 1952), p. 242; and L. von Mises, Positivism: A Study of Human Understanding (Cambridge: Harvard University Press, 1951), p. 1.
33. M. Levy, "A Note on Pareto's Logical-Non-Logical Categories," American Sociological Review, 13 (1948), p. 758.
34. R. Bailey, Sociology Faces Pessimism (The Hague: Martinus Nijhoff, 1958), p. 74.
35. Ibid., p. 74.
36. T. Parsons et al., (eds.), Theories of Society (Glencoe, Illinois: The Free Press, 1961), p. 1062.
37. R. Bailey, op. cit., p. 74.
38. V. Pareto, The Mind and Society (New York: Harcourt, Brace and Co., 1935), vol. I., p. 77.
39. Ibid., pp. 77-78.
40. Ibid., p. 76.
41. Ibid., p. 77.
42. M. Levy, op. cit., p. 758.
43. M. Black, The Social Theories of Talcott Parsons (Englewood Cliffs: Prentice Hall, 1961), p. 12.
44. G. Nettler, "Curelty, Dignity and Determinism," American Sociological Review, 24 (1959), pp. 375-384).
45. P. Deising, op. cit., p. 3.

46. M. Levy, The Structure of Society (Princeton: Princeton University Press, 1952), p. 242.
47. M. Smith, "Rationality and the Social Process," Journal of Individual Psychology, 16 (1960), pp. 25-35.
48. L. Lewis and J. Lopreato, op.cit., pp. 508-514.
49. C. Hempel, op. cit., pp. 466-467.
50. M. Levy, op. cit., p. 756.
51. M. Smith, op. cit., pp. 25-35.
52. J. Watkins, "Ideal Types and Historical Explanation," in H. Feigl and M. Brodbeck, Readings in the Philosophy of Science (New York: Appleton-Century-Crofts, 1953), p. 741.
53. Ibid., p. 741.
54. Ibid., p. 742.
55. V. Pareto, op. cit., p. 91.
56. Q. Gibson, The Logic of Social Inquiry (London: Routledge and Kegan Paul, 1963), p. 160.
57. Mathematical decision theory is discussed in Chapter Three. For further discussion, see: C. Hempel, Aspects of Scientific Explanation (New York: The Free Press, 1965), pp. 466-467, and J. von Neumann and O. Morgenstern, Theory of Games and Economic Behavior (Princeton: Princeton University Press, 1947).
58. T. Parsons, The Structure of Social Action (New York: The Free Press, 1949), p. 13.
59. M. Weber, The Theory of Economic and Social Organization (London: William Hodge and Co., 1947), pp. 83-84.
60. Ibid., p. 84.
61. V. Pareto, op.cit., p. 78.
62. F. House, "Pareto in the Development of Modern Sociology," Journal of Social Philosophy, 1 (1935), p. 81.

63. L. Schneider, The Freudian Psychology and Veblen's Social Theory (New York: King's Crown Press, 1949), pp. 14-17.

64. V. Pareto, op.cit.

65. L. Schneider, op.cit., p. 14.

66. Ibid., p. 14.

67. Ibid., p. 15.

68. E. Nagel, The Structure of Science (New York: Harcourt, Brace. World Inc., 1961), p. 491. See also footnote 35 in Nagel, p. 491.

69. A. Kaplan, The Conduct of Inquiry (San Francisco: Chandler Publishing Co., 1964), pp. 393-4.

70. Ibid., p. 395.

71. Ibid., p. 395.

72. E. Nagel, op.cit., p. 491.

73. L. Fuller, "Human Purpose and Natural Law," Natural Law Forum, 3 (1958), pp. 68-76; E. Nagel, "On the Fusion of Fact and Value: A Reply to Professor Fuller," Natural Law Forum, 3 (1958), pp. 77-82; L. Fuller, "A Rejoinder to Professor Nagel," Natural Law Forum, 3 (1958), pp. 83-104; E. Nagel, "Fact, Value and Human Purpose," Natural Law Forum, 4 (1959), pp. 26-43.

74. L. Fuller, "Human Purpose and Natural Law," op.cit., p. 68.

75. E. Nagel, "On the Fusion of Fact and Value," op.cit., p. 79; E. Nagel, "Fact, Value and Human Purpose," op. cit., p. 27.

76. E. Nagel, "Fact, Value and Human Purpose," op. cit., pp. 39-40.

77. L. Fuller, "A Rejoinder to Professor Nagel," op. cit., p. 86.

78. Ibid., p. 84.

79. Ibid., pp. 89-90.

80. A. Schuetz, op. cit., p. 131.

CHAPTER THREE

THE REQUIREMENTS OF RATIONAL ACTION AND SOME IMPEDIMENTA

Once a definition of the term rationality has been established, one can pose the question: what are some of the requirements and limitations of rational action? The answer depends upon the conclusions reached regarding four requirements of rational action.

In order that action may be called rational there must be an awareness of the ends which are sought. This criterion is called the consciousness requirement, and is concerned with the query: to what extent is there awareness of ends? A second requirement of rationality, related to the first, is called the empirical requirement. This requirement is concerned with the question: to what extent are ends observable? The third requirement of rational action is the compatibility requirement and is concerned with the query: to what extent are goals conflicting or competing? The informational requirement is concerned with the query: what is the extent of information about efficient means upon which rational action is based? These requirements will be examined and, whenever possible, the theoretical factors will be

supplemented with empirical findings.

I. The Consciousness Requirement

If man is to be rational, he must first know what he wants. According to many sociological, as well as popular definitions, 'what man wants' is often synonymous with 'what man values,' and, as such, concerns 'what is desired' and 'what ought to be.' Recognition of the role values play in rational behavior presents several important problems which must be considered in a discussion of the probability of rational action.

Schneider elaborates the first of these problems. Values often constitute ends of action, but Schneider argues that what men say they want may not always be the same as what their actions show they 'really' want. This seems to be the only way to 'explain' the persistence of inefficient action in the face of adequate information: for example, the persistent belief that punishment is a deterrent to murder. (1)

A second problem is that some goals may be valued because the actor is unaware of their exact nature. In such instances, "... unforeseen consequences actually constitute the purposes of the action" (2)

The two points noted above are brought out rather clearly by Maslow who argues that it is not known how much 'social behavior' is telic or how frequently men know what they want when they act, even when they give us 'purposes' as reasons for their actions.(3)

II. The Empirical Requirement

Empirical ends of action must fulfil two criteria; first, they must be specific and distinguishable from other objectives; and second, recognition of goal attainment must rest upon public observables, so that one may point to public signs of goal attainment. Goals that transcend public experience, such as getting to heaven, do not count. For both of these criteria, the fact that values often constitute the goals of action may impede rational action. Some values toward which men say they are motivated, may be too abstract to measure. In this regard, van den Haag notes that there are some abstractions that can not be related to observables. He argues that "'happiness','the public weal', and 'national harmony', are words often used so vaguely that they conceal rather than reveal thought, because they are not clearly related to any identifiable experience or state of affairs."(4)

Further, those researchers who discuss rationality in terms of the conscious-unconscious dimension face the problem of measuring the unconscious. Where workers use a definition of unconscious that has no empirical referent, analysis remains outside the scope of science, and any treatises on rationality may be of limited consequence.

The empirical requirement is also related to the relationships between symbols and their referents. The process of assigning symbols to ends is an exceedingly complicated one, and it is beyond the scope of this thesis to present the issues involved. Two problems, however, are relevant.

Hypostatization is the fallacy that for every concept there is a particular entity designated by the expression.(5) Action taken toward hypostatized symbols may not be rational.

The levels of abstraction in language also present problems. Men often make inappropriate connections between symbols and the things to which these symbols refer. For example, H. Winthrop has studied the relationship of semantic factors to personality integration.(6) He tested the influence of language factors on attitude

consistency, and concluded, that in a large number of cases, inconsistency is the consequence of "... linguistic causes, that is, improper manipulation, in using or listening to speech, of the verbal aspects of the environment." (7) Similarly, L. Harding, in a study concerned with the situational variation in values, tested the difference in values found in two areas. He classified values held as opinion as "the general level," and values which direct responses in actual practical situations, "values on the particular level." He confirmed the hypothesis that "... the values an individual holds theoretically in terms of opinion are not the values which are dominant in directing his responses to practical situations." (8) Harding's findings illustrate the difficulty of determining what, in fact, is valued, and suggest the possibility of inconsistencies between general and operating values in a particular situation. La Piere's famous study revealing discrepancies between words and deeds illustrates the latter possibility. (9)

III. The Compatibility Requirement

Even in relatively simple societies, there is a variety of ends and at any given time an individual may direct his action toward the achievement of more than one

of these. The relationship of ends to one another can take several forms, three of which are: complementary, competitive and conflicting. If goals are complementary, they are, by definition, all secondary goals relevant to the achievement of some larger goal and consequently the 'compatibility' requirement for rational action is satisfied. The relationships among conflicting and competing ends and rational action are discussed below.

A. Conflicting and Competing Ends

Ends are considered conflicting if they place the actor in a position where he must choose one OR the other, but not both, or even modified versions of both. The most usual instance of conflicting ends involves what Weber calls Wertrational action, or action directed towards absolute ends. Weber describes such action as having the following characteristics; it is regarded as an end in itself; it is taken without consideration of the consequences; it is generated by obedience to principles held by the actor; it is concerned with a 'cause' with absolute values such as 'duty,' 'honor,' or 'beauty.'(10)

It is impossible to rank absolute ends in order of importance, for all are 'absolutely' important. It is

impossible to modify them or to substitute them for more compatible ends, yet the pursuit of one may preclude the attainment of some others. When ends conflict, rational action is possible, only by the abandonment of one of the goals. The consequences of conflicting ends may be alienation.(11)

Ends are considered competing if they place the actor in the position of having to choose among various ends or modifications of those ends. Competing ends involve what Weber calls Zweckrational action: action involving the weighing of ends and means, ends and side consequences, and, ends and other ends.(12) Goals are flexible: they can be ranked in order of priority. Rational action is possible if the actor is able to fulfil this requirement of transitivity.

B. The Problem of Transitivity

Transitivity is defined by Rose as "... that characteristic of rationality or consistency of choice such that if a person or group prefers A to B and B to C, he or it also prefers A to C."(13) Transitivity should be distinguished from inconsistency, which occurs when a subject required to make a choice from the same alternatives under the same circumstances does not make the same

choice. Intransitivity describes a subject's choice when he chooses A over B, and B over C, but not C over A. Transitivity, intransitivity and inconsistency may occur at both the individual and group levels.

Group intransitivity has been demonstrated by Arrow, who discussed the 'paradox of voting,' and is quoted by Rose as follows:

The paradox of voting represents one kind of intransitivity, and is presented by Arrow in the following manner: Suppose there is a community consisting of three voters, and this community must choose among three alternative modes of social action (e.g. disarmament, cold war, or hot war) ... A natural way of arriving at the collective preference scale would be to say that one alternative is preferred to another, if a majority of the community prefer the first alternative to the second, i.e., would choose the first over the second if those were the only two alternatives ... Let A, B and C be the three alternatives, and 1, 2 and 3 the three individuals. Suppose individual 1 prefers A to B and B to C (and therefore A to C), individual 2 prefers B to C and C to A (and therefore B to A), and individual 3 prefers C to A and A to B (and therefore C to B). Then a majority prefer A to B and B to C. If the community is said to be behaving rationally, we are forced to say that A is preferred to C. But in fact a majority of the community prefers C to A. So the method just outlined for passing from individual to collective tastes fails to satisfy the condition of rationality, as we ordinarily understand it. (14)

May examined group transitivity among hypothetical

choices of marital partners.(15) Sixty college students were given three hypothetical potential mates, X, Y and Z. In intelligence, they ranked X, Y and Z; in attractiveness they ranked Y, Z and X; and in wealth they ranked Z, X and Y. Subjects were confronted at different times with pairs labelled with randomly chosen letters. On each occasion, X was described as very intelligent, plain looking and well-off; Y as intelligent, very good looking and poor; and Z as fairly intelligent, good looking and rich. All prospects were described as acceptable in every way, none being so poor, plain or stupid as to be automatically eliminated. Each individual's responses were kept together. During the experiment proper, the subjects were never confronted with all three alternatives at once. Later they were asked to order all three. Parts of the experiment were then repeated to test for inconsistency or capriciousness. The data indicated that although individual subjects are systematic in their responses, group preferences (as defined by majority opinion) reveal an intransitive pattern. This experiment does not indicate that all choices are intransitive, but it does suggest that when individual choices are added together as a group, the resulting patterns of preference may be intransitive.

Intransitive patterns in groups have been

analyzed in detail by May. Drawing on the work of Arrow, he develops an elaborate argument to show that intransitive patterns may rise from the aggregation of preference orderings. After a detailed analysis May concluded that:

Arrow's work showed that we cannot count on transitivity of group preferences even if individual preferences are transitive. The present study shows that we cannot expect individual preferences to be always transitive. The expectation of intransitive group preferences is, of course, increased by these considerations. (16)

We shall now look at the problem of individual transitivity. The economist Papandreou conducted experimental research to determine whether or not intransitivity occurred in imagined choice situations. He presented his subjects with books of admission tickets to plays, concerts and athletic events. Each book contained a total of four admission tickets to two events. Subjects were required to choose between pairs of books, or to indicate that they were indifferent to which one they received. Analysis of the data indicated that about five per cent of the choices were intransitive. (17)

Davidson and Marschak predicted transitivity in an experiment on betting choices. They found the incidence of intransitive choices to be from seven to fourteen

per cent. Like Papandreou, they found intransitivity to be very much the exception rather than the rule.(18)

Davis replicated previous experiments which had indicated a high incidence of individual intransitivity. He concluded that many intransitive patterns could be attributed to random choices between pairs of alternatives. The basis of his position is that subjects, if given the same set of alternatives a second time, do not generally repeat the same intransitivities.(19) In assessing Davis' study, Edwards states:

... his own data raise serious doubts that his subjects were indifferent among the objects involved in the intransitive trials - though neither experimental nor statistical procedures encourage the reader to conclude much of anything from this study.(20)

It also seems difficult to defend the position that choices are random simply because the second choices are not identical to the first ones. Edwards goes on to note that generally the experiments, which are designed to test the occurrence of transitivity, create conditions favorable to that occurrence:

No experiment yet reported has created conditions deliberately designed to be unfavorable to transitivity, strong or weak and ended up accepting even weak stochastic transitivity. In short, as

a basis for psychological theorizing, algebraic transitivity is dead, and stochastic transitivity, strong or weak, has yet to be exposed to the adverse climate of hostile experiments.(21)

The above discussion of individual and group transitivity leads to several conclusions. The date suggest that individuals are more likely, or as likely, to be transitive in choices as groups. Group intransitivity cannot be taken as an index of individual intransitivity, for there are some indications that individuals may be transitive in choice, but when these choices are grouped, intransitivity is evident. The above remarks raise the question of the efficiency of groups versus individuals in problem solving. Secord and Blackman have discussed this issue with reference to "pseudo and real group effects."(22) Pseudo effects are group estimates based on a statistical property of the group rather than on the interaction of group members. Early research, comparing individual and group performance in problem solving, showed the group to be superior. However, these findings are now being reinterpreted and the superiority of group performance has been explained by pseudo group effects.(23) For example, group superiority may be explained by:

A well-known statistical principle. With increases in the number of estimates upon which some combined estimate is based, the variability of such estimates around the true measure is reduced.(24)

The superiority of the group has been equalled by combining judgments made by the same individuals working in isolation. The pseudo group effect, in most cases, occurs because the accuracy of estimates can be increased simply by using a large number of judgments.(25)

A second statistical effect has been used to explain the superiority of the group. It is noted that there are differences in the probabilities of solving a problem. The larger the number of people working on a problem, the larger the probabilities of a solution.(26)

The implications of the above observations are apparent. There appear to be reasonable grounds for suggesting that groups are not superior to individuals in problem solving, and consequently, the probability of groups acting rationally is less or equal to that of individuals.

C. The Maximization of Utility

Let us assume that the assumption of transitivity can be substantiated in some part, and that competing values can be ordered in such a way that rational action is

possible. We cannot further assume that rational action will in fact occur unless we can also assume that it is possible to determine the degree of desirability of each of those values. The question is not just a matter of which end is wanted more, but of how much more one is desired than another?

In games theory, the transitivity assumption is referred to as the maximization of utility: the extent to which subjects are able to maximize the gain in any given action situation. The objective utility of the consequences of a given alternative, is determined by multiplying the utility of each member of the set by its known probability of occurrence and taking the sum of the members of the set. The subjective utility is a number that represents the extent to which the individual thinks a given event is likely to occur. (27)

Mosteller and Mogee designed one of the few experiments directly concerned with the maximization of utility. The subjects were Harvard undergraduates and National Guardsmen. They were presented with bets which they could accept or refuse. The data obtained from simple bets were used to make predictions about more complex bets. The authors concluded that the subjects did not try to maximize the "objective utility." (28)

An elaborate experiment was conducted by Scholde, et al., to determine the relationships among personality variables and risk-taking behavior.(29) The subjects were 28 airforce enlisted men, 34 college undergraduates, and 8 graduate students in mathematics. Risk-taking was measured in gambling situations in which each subject was required to bet on the outcome of 50 rolls of dice. They were given money with which to bet, and were required to bet on nine alternative outcomes with known probabilities but with different expected values. Schodel, et al., found that the expected dollar value had negligible importance in determining betting preferences. They concluded that:

... people who are very much aware of objective probabilities and expected return are governed by other considerations in their risk-taking preferences.(30)

As it became increasingly apparent that the assumption of maximization of objective utility was untenable, researchers in the field of decision theory turned their attention to the problem of maximization of "subjective utility." Edwards introduced a new dimension into the problem of the relationship between subjective and objective probability. He found that, under conditions where subjects could either win or break even, subjective probability

was equal to objective probability. He concluded that there was an interaction between the "sign of the payoff" and the "shape of the subjective probability function," and that his results were "... likely to haunt subjective probability for some time to come." (31)

An extensive research program on the nature of subjective probability was carried out by Cohen, et al. The conclusions are as follows:

Firstly, the relationship is complex and cannot be reduced to a simple formula. In certain instances the two types of probability tend to coincide; in other circumstances they diverge and this divergence seems of a systematic nature. Secondly, subjective probabilities are, in general, very much influenced by age and experience. Thirdly, the subjective probability relating to any particular preference expressed is affected by the number and nature of the alternatives offered. (32)

D. Summary

If goals are conflicting and mutually exclusive, rational action is difficult. If they are complementary, there is no problem for rational conduct. If, however, ends are competing, rational action contingent upon transitivity: the rank ordering of ends or values. Rational action is also contingent upon the maximization of utility: the utilization of a rank ordering of ends to obtain the

greatest number of ends. The available empirical evidence indicates that the assumption of transitivity is moot, and that the maximization of either objective or subjective utility is not an expected characteristic of action. From the studies examined then, it would appear that the rational model is limited.

It is precarious to draw conclusions from these few experiments as to the extent to which men generally rank their objectives. Consequently we are unable to make estimates as to the prevalence of transitivity in 'real life,' or about how frequently goals are actually ordered.

IV. The Informational Dimension

The informational dimension is the extent to which men have information upon which to base rational action. An adequate informational basis consists of two main elements: (a) access to information and, (b) correct use of information, which involves the response to information, and the processing of information.

A. Access to Information

While there might be sufficient information to enable an omniscient actor to solve a problem, it would

not help a given actor unless he had access to that information. It will be remembered that rationality is not only considered from the point of view of the actor, but in the light of the 'most extensive knowledge' as well. By this criterion, any factors which limit man's possession of available information also limit his capacity for rational action.

1. Error

When actors go to empirical sources for their information, their attempts to pursue a rational course may be hindered because of errors in the knowledge. There are many sources of such error, a few of which will be discussed.

a) 'Normal' limitations of perception

Forensic psychologists have described the operation of factors affecting perceptual accuracy. (33) Some of these limiting conditions have been summarized by Nettler:

- #1. There is no point-to-point correspondence between the physical nature of the external stimuli and the experience aroused, and, hence, the consequent behaviour.

#2. When the external field of stimulation is very complex - our anticipations play an important part in determining perception.

#3. Perception ... appears almost always to depend upon (systems of) relations.

#4 These 'systems of relations' tend to get organized (structured) into interdependent wholes, patterns, called FRAMES OF REFERENCE.

#5. Society provides many frames of reference, acquired during the socialization process, ... which are, in Durkheim's terms, 'exterior and prior' to the individual.

#6. Whenever individuals are confronted with a 'novel problem', they will first attempt its resolution through application of their acquired repertoire of frames of reference. BUT, where such frames are inapplicable AND where the individuals are interacting ..., a new frame of reference will tend to arise so that chaos may be organized. (34)

b) 'Pathological' limitations of perception

Error may be the result of grossly distorted perceptions such as the delusions and hallucinations of psychotics.

c) Group limitations

Some group explanations of reality are inaccurate, and yet are almost automatically accepted as 'fact' by the group members. This phenomenon constitutes a third

source of error. Ethnocentrism and stereotyping are examples of knowledge based on erroneous group perceptions. (35)

d) Deliberate distortion

Men have the notorious but well-deserved reputation of lying on many occasions. Some non-rational behavior is based upon knowledge which may be deliberately distorted by the very source of knowledge which the actor has come to trust as valid.

Non-rational action may occur because it is based upon erroneous and inaccurate knowledge. The foregoing suggests four main sources of such error. Data concerning the actual frequency with which these errors occur are not available.

2. Insufficient Knowledge

a) Ignorance

Ignorance is commonly viewed as deleterious to the goals of stability, order and progress. The logical corollary of this assumption is that an increase of information leads to increased benefits for mankind. Such thinking has elevated information to the level of a panacea for all man's troubles. The enthusiastic endorsement of

the value of information and the widespread belief in its efficacy has led to the ideal of universal public education. Some social scientists advocate that 'happiness,' 'adjustment,' and general 'social good' will result from improved lines of communication, greater knowledge of the 'real' meanings of race and nationality, greater sensitivity to personal differences and the nuances of interpersonal relations, greater insight by neurotics into their non-normal relations, more extensive information for prospective marriage partners, and greater cognizance of issues by the voting public.(36) It is postulated that man's ignorance (of the facts pertaining to the issues upon which he must act) is in direct proportion to the extent to which his behavior falls short of the ideal of rational action. The question then becomes: how ignorant or knowledgeable is man about what issues? Although one cannot answer this question in all respects an estimate of public knowledge can be made from public opinion studies.

(1) Informational levels of the public. Several studies have been conducted to determine how much the general public knows about given issues. In a democracy, where public policy presumably depends upon voting behavior and therefore upon the political awareness of citizens, researchers have been concerned with the political knowledge of

citizens. Lane presents an extensive review of studies relating to public knowledge about political leaders, facts and issues. He concludes that:

... there are very considerable gaps in public knowledge about the way government works ... A large proportion (of lower and working class) do not know the centrally important (political) issues at any one time: ... most people are unaware of the nature and meaning of the Bill of Rights, the central features of the electoral system, the names of the three branches of government ... The relatively low amount of information possessed by most persons means that most must decide their political preferences on the basis of comparatively simple slogans and catchwords ... (37)

Hyman and Sheatsley utilize data from the National Opinion Research Centre to study information levels in the general public. Their analysis discloses the existence of a hard core of "chronic know-nothings" who could be generally classified as "unaware" of what was happening around them. This group constitutes 72% of the sample. For example, when the authors selected for special study five items of international importance, they found that one of every seven subjects was unaware of any of the issues, and one in every three was unaware of four of the issues. Such evidence indicates that the "know-nothings" are of considerable number. (38)

(2) Information levels of specific groups. If the public is generally ignorant, some parts of it are more ignorant than others. Significant group differences have been found which suggest that the proportion of informed people is greater among younger than older-aged groups, among urban than rural groups, among the well-educated than the less-educated, and among men rather than women. (39)

Another interesting group difference is that of ideological preferences. At one time, it was felt that those who endorsed liberal ideologies would be better informed than their conservative counterparts. Smith, has shown that this supposed relationship does not hold for liberals in general, but only for a particular kind. (40)

A recent study by Lewis and Lopreato presents a more optimistic view of man's ability to act rationally. Lewis and Lopreato defined arationality as "single ended action which from the scientific point of view is totally inappropriate for an intended end." (41)

They were interested in the means mothers used to cope with the illnesses of their children. All the children suffered from one of four illnesses of varying degrees of seriousness. Lewis and Lopreato conclude that

arationality increased with perceived danger and decreased with increased knowledge. They suggest that scientific information -- in this case, medical knowledge relevant to the disease -- is a necessary pre-condition for rational behavior. From their findings they conclude that "... the use of irrational behaviour recedes as modern civilization unfolds." (42). Whether or not there is a "...trend in human society toward greater rationality," is debatable, but at least Lewis and Lopreato provide one demonstration of the association of knowledge and rational action. (43)

(3) Selective Attention. An individual or group may have inadequate information with which to make rational decisions, not because of ignorance but because he is biased in his seeking of information.

Hyman and Sheatsley note that information is acquired by those who have an a priori interest in the subject matter. They cite evidence to show that in certain situations, where information is equally available to all, it will be received by one-half of those who are interested in the subject, and by one-fifth of those who are uninterested. (44) Other evidence is cited to support the hypothesis that people expose themselves to information which is congenial with their existing attitudes. As Lane

comments " ... there are those who use information selectively to reinforce an ideological framework which is inaccessible to uncongenial knowledge." (45) Contradicting information is either ignored, or is likely to have "... no effect whatsoever." (46)

Hyman and Sheatsley's conclusion that apathy and ignorance cannot be resolved simply by increasing the flow of available information, can be generalized. To a great extent, man is ignorant because he tends to seek information about those areas in which he already has some knowledge and to ignore information that conflicts with his beliefs. This proclivity opens the way for non-rational action.

B. Utilization of Information

It is important to point out, that although the attainment of information is generally conducive to rational action, this is not necessarily so. Information may be sought for a variety of motives, some of which leads to non-rational action. Thus, Lane comments:

Information may be sought as an aggressive weapon against others; it is useful for the person ... whose main source of self-esteem is 'being right'; there are collectors of

information who use it in a fetishistic way, each item is libidinized and lovingly stored away in the memory ... (47)

Rational action may be difficult to achieve even when adequate information is available, because this information may be used for purposes other than rational action.

1. Response to Information

Information may be rejected outright. Lane suggests that there are some people who reject information because it is 'threatening' to them. This rejection may take several forms. Cathartic ignorance is the type 'used' by persons who 'need' their unchallenged biases in order to give vent to angry feelings toward a given object or group. Status-quo ignorance results from satisfaction with things as they are, and leads to rejection of any new information which might challenge this situation. Socializing ignorance occurs when it is necessary to inhibit communication. If an actor is ignorant of an unpopular fact, he cannot make embarrassing or indiscreet comments about it. Privatizing ignorance is a consequence of the strain between a citizen's private life and the demands of his public life. Intrusive demands upon private life could well lead a man to say: "Enough. I don't want to know any more." (48)

The processes involved in an individual's response to information are exceedingly complicated. Much of the empirical work about these processes has been concerned with the problems of attitude change.

a) Models of Attitude Change

Sarnoff, et al., tested three models of attitude change. (49) The "rational model" assumes that man seeks to understand his world by achieving a consistent picture of its complexities. This model holds that attitudes are a function of information. The "reward-punishment" model sees attitudes as a consequence of externally applied rewards and punishments. A third model, the "ego-defensive model" holds that attitudes are symptoms in defense of the ego. On the basis of their findings, Sarnoff, et al., argue that attempts to alter attitudes based on the "rational" and "reward-punishment" models may actually reinforce the attitudes of the "ego-defensive" type. These models assume that the individual is interested in a more accurate and complete knowledge of his world, or that he is interested primarily in the maximization of his conscious needs. The authors indicate, however, that as the subject is primarily concerned with avoiding direct confrontation with his internal conflicts, he will protect himself from such possibilities. From their data, the authors conclude that

"ego-defensive models" not only result in more change than do "rational" or "reward-punishment" models, but that the changes last longer. (50)

Newcomb achieved results consistent with the foregoing study. He studied individual attitude change in two student communities where there were conflicting attitudes towards current social issues. He defends the thesis that the response to new information is determined by a priori attitudes toward the information. This a priori attitude is in turn determined by the uniformity, direction and intensity of the general attitudes in the community. The community response to information determines the individual's response to that information. (51)

Rosenberg designed a study to examine the relationship between opinions and information. He hypnotized subjects and suggested to them that their attitudes towards a social issue were the opposite of the ones they actually had. Rosenberg presents evidence to show that the hypnotic suggestions were effective in reversing the directions and intensity of opinions. He shows that the change was the product of two separate changes in the thinking of his subjects. First, their values were altered to correspond with their changed attitudes; and second, their ideas on how their new values could be implemented were modified.

Consequently, by altering the subject's feeling toward the issue, Rosenberg was able to make his subjects more responsive to additional information. Lane cites this study to show that there is good reason to believe that opinions come first, followed by reasons and information. (52)

b) Selective Inattention

In some instances, information which an actor possesses is simply ignored. He does not actively reject it; he simply fails to take it into account. Such responses may be motivated by a number of circumstances, ranging from boredom to over-exposure. For example, in the discipline of sociology posing certain questions implicitly involves the questioning of certain assumptions and theories. A general reluctance to be concerned with such 'threatening' issues has been noted by both Ehrlich(53) and Dexter(54).

The refusal to utilize existing information may often lead to non-rational behavior. For example, Frenkel-Brunswik has found that one of the characteristics of the authoritarian personality is an intolerance of ambiguity. (55) Under these circumstances a possible (and perhaps necessary) defense mechanism is to ignore information which disturbs established patterns and leads to ambiguity.

Individuals with ample access to information relevant to their problem may also be guilty of selective inattention -- of 'overlooking' facts which if taken into account would necessarily affect their behavior. Nettler presents an example of such inattention in his critique of a study by Allport and Kramer.(56) Allport and Kramer use as an index of prejudice the assumption that fraud constitutes a greater threat to the public than violence. They conclude that individuals who fear violence are less prejudiced than those who fear fraud. Allport and Kramer thus assume data without looking at such and consequently commit an error, for as Nettler demonstrates, the data indicate that the threat of fraud is more congruent with reality than the threat of violence. The point is that these prominent social psychologists should have known better than to assume data without examining it.

c) Inaccurate Associations

In some instances, information is not effectively used because the actor fails to associate it correctly with other relevant information. He knows the right facts but uses them in the 'wrong' way. For example, in 1948 a study of voting behavior and information disclosed that, although voters were reasonably cognizant of the candidates

and the issues involved in the election, " ... only about one third of the voters were highly accurate in their perception of where the candidates stood on the issues, ..." (57) and others misjudged at least one of the four issues upon which the candidates had endorsed positions. The inability of respondents to link the issue with the name of the candidate demonstrates the lack of a point-to-point relationship between information and interpretation. In addition, it challenges the assumption that a voter is 'rational,' even if he votes only out of affiliation to a party, assuming that the party represents a means to obtain the voter's ends. (58) If voters are not aware of the position of their candidates, their voting behavior can be construed as 'rational' only through some adulteration of that term.

2. Processing of Information

A) Conceptual Clarity and Logic

Information must be interpreted if it is to be effectively used in goal-orientated behavior. A prerequisite for interpretation is conceptual clarity, that is, a clear understanding of the concepts in which the information is conveyed.

For example, Lane found that the concept "good citizen" is not a clearly formulated one. When he asked a sample of working-class men what the term meant, everyone "knew," but each one had a different definition. Some of the definitions concerned a good, honest, sincere man; others a friendly man who helped in common neighborhood tasks; some described a good family man; others as a person who fulfilled his political duties faithfully; still others depicted a man who was not criticized socially.(59) Such a lack of conceptual clarity interferes with information processing and renders well-intended efforts towards developing "good citizenship" difficult.

Another difficulty in processing information is noted by Leffort who says that, when men are presented with emotionally-laden 'facts,' they frequently fail to reach reasonable conclusions. Leffort's study was designed to determine some of the factors involved in logical thinking. He was chiefly concerned with the impact of verbal stereotypes upon the ability to correctly interpret logical syllogisms. He found that the reasoning process was highly responsive to the emotional content of the syllogisms: interpretations of 'neutral' syllogisms were generally more accurate than interpretations of emotionally-laden syllogisms.(60) Lefford's study demonstrates that the logical process of interpreting information is likely to be distorted

if the information has emotional valence.

Peterson and Beach have extensively explored the problem of making accurate inferences from observations. Comparisons were made between men's intuitive inferences, and objective inferences based upon statistics and probability theory. Peterson and Beach found that their subjects were able to make inferences on the basis of relevant variables, and that these inferences were in the appropriate direction. However, there were systematic discrepancies between intuitive and objective inferences: they were too conservative, subjects failed to use all of the information available in the observations, to weigh deviations heavily enough, and placed too much emphasis on observations which were positive. Intuitive inferences varied from objective inferences because of the tendency of subjects to devalue deviations, and to overemphasize data which fit their preconceptions. (61)

The problem of information processing is further complicated by the inability of an individual to experience everything, and hence the necessity of his reliance upon secondary sources. Such sources of information may be themselves subject to error, and the individual who bases his actions upon them may be misled. Morgenstern illustrates

some of these problems in economics. (62)

b) Individual Differences in Rational Action

Other things being equal, "rationality" varies from one individual to another. The concept of rationality is often used by advocates of 'mental health,' who assume that the 'mentally ill' are less capable of rational action than the 'mentally healthy.' (63) Such an assertion is debatable because of the lack of consensus among the definitions of 'mental illness' and 'mental health.' However, at least one study is relevant to our understanding of the personal correlates of rational action. Peck defines rational behavior as "... the degree to which one perceives life situations accurately and acts in an intelligent, effective way to achieve his purposes." (64) He studied his respondents over a seven-year period, and concluded that rational behavior is correlated with psychological autonomy, consistency of personal aims and values, emotional maturity, accuracy of self-perception, concern for other people, and emotional stability. Intelligence accounts for only a small amount of the variance and Peck concludes that although "... high genetic intelligence is doubtless necessary for the handling of complex problems ... it is not sufficient for intelligent behavior." (65) Rationality was found to

vary widely in children of the same intelligence, reinforcing Peck's hypothesis that emotional factors play a dominant role in effective behavior.

V. Summary and Conclusions

From this discussion certain conclusions may be drawn with respect to the relationship between rationality and its four requirements. Conclusions about the consciousness requirement are limited for several reasons. It was noted that some goals that men hold are desired precisely because they are unanticipated. Some authors contend that there may be a conflict between conscious and unconscious goals. This position is difficult to defend because we often have no measure of the unconscious because of the way it is defined, and we have no measure of the extent to which conscious goals motivate action.

The empirical requirement presents the problem of the specification of ends. Some of the goals deemed important for man may be so abstract or ambiguous (for example, 'happiness,' and 'harmony') that it is difficult to assess the success or failure of their achievement.

Because man has a multiplicity of goals, there is the problem of their compatibility. The compatibility

requirement assumes an ordering and weighing of values in an environment where values may conflict. The conclusions from empirical studies addressed to the harmony of values, individual and collective, are moot, although there seems to be some indication that the probability of rational action by individuals is higher than or equal to that by groups. We are also able to conclude that previous research indicating the superiority of group solutions to problems is the consequence of statistical artifacts.

There are two problems with the informational requirement; the problem of access and the problem of utilization. With respect to access and the problem of insufficient knowledge, there are data from public opinion studies on limited but important issues. The general conclusions are that the public is often ill-informed, but the most informed are likely to be young, educated, urban and male.

The relationships among the effective utilization of information, behavior and attitudes is complex. Information may be used for a large number of reasons other than rational decision-making. Studies have shown that the effective use of information is related more to personal and emotional factors than to intelligence, or the availability of information. There is no adequate research on the results

of changing levels of information, as Edwards notes in the studies of decision making. Such research has been concerned with the process of arriving at a choice without putting the choice into action. Our definition of rationality requires action, a decision must be implemented. This latter requirement presents a more complex problem not directly dealt with by the above studies.

In general, we can assume that some behavior is rational. However, we do not know how much social behavior is telic even when men give reasons for their intended actions. There may be reasonable grounds for suggesting that individuals are equal to or more rational than groups but the measure of this would require a 'log' of daily action. In the absence of such a measure of individual rationality, and given the generation of intransitivity when individual choices are grouped, it seems that the model of rational action can be applied to social policy and social action theory only with considerable caution.

FOOTNOTES: CHAPTER THREE

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CHAPTER FOUR

SOME IMPLICATIONS OF RATIONALITY FOR SOCIAL ACTION THEORY

Social action theory occupies a dominant position in American sociology and " ... seems to have won extensive acceptance with only minimal theoretical opposition."(1) Hinkle has summarized seven basic suppositions of action theory based on the works of MacIver, Znaniecki, and Parsons but presumably applicable to the whole school.(2) These tenets are as follows:

Men's social activities arise from their consciousness of themselves (as subjects) and of others and the external situations (as objects).

As subjects, men act to achieve their (subjective) intentions, purposes, aims, ends, objectives or goals.

Their courses of action are limited by unmodifiable conditions or circumstances.

Exercising will or judgment, they choose, assess, and evaluate what they will do, are doing, or have done.

Standards, rules, or moral principles are invoked in arriving at decisions.

They use appropriate means, techniques, procedures, methods, and instruments.(3)

In addition to these characteristics the "action" school has a methodological orientation. Its epistemic technique is verstehen:

Any study of social relationships requires the researcher to use subjective investigative techniques such as 'verstehen', imaginative or sympathetic reconstruction, or vicarious experience.(4)

The first major proponent of social action theory was Weber. Hinkle suggests that other antecedents of the school may be traced in the works of theorists such as Ward, Small, Giddings, Ross, Park, Cooley, Thomas, and Mead.(5) More recent action theorists include Znaniecki, MacIver, Mannheim, Merton, and Parsons.

The purpose of this chapter is to delineate some major characteristics of the social action school and to discover the implications of rationality for this particular school. The first step will be to discuss briefly the contributions of Weber and several other social action theorists. Our purposes do not require discussion of all relevant theorists, and attention is generally restricted to those selected by Hinkle as most worthy of attention.

I. Some Major Social Action Theorists

A. Weber

One of the most extensive analyses of rationality is found in Weber's work. He is one of the first sociologists to disassociate the idea of rationality from the idea of social progress. Kolegar argues that the dominant theme of Weber's work is rationality and its role in all areas of social life.(6)

The conceptual-methodological and taxonomic aspects of Weber's work reflect his emphasis on rationality. The classification of authority and social action is based on the presence or absence of rationality. For example, the modes of social action are arranged along a continuum of decreasing rationality.(7)

According to Weber, "meaningful" social action is a consciously perceived relationship between means and ends. Action which is "rationally purposive" is Zweckrational, and refers to action in situations where there is a plurality of means and ends, and the actor is "free" to choose among the means on the basis of their efficiency.

Action which is "rational in terms of values"

is Wertrational, and refers to action in situations where the ends are fixed in advance, and the actor is "free" to choose among the available means on the basis of efficiency.(8) An example of Wertrational conduct is behavior directed towards religiously correct goals, which may be pursued in a number of ways. Weber's category of "affective" action covers behavior in which both ends and means are determined by emotion. A fourth type of action is "traditional," in which both ends and means are determined by custom and habit.

The part rationality plays in Weber's methods is seen in the 'ideal type' constructs and the method of verstehen. He argues that the use of these devices will increase the clarity and accuracy of understanding human action. Understanding can best be attained by the interpretation of action " ... which treats all irrational, affectually determined elements of behavior as factors of deviation from the conceptually pure type of rational action."(9)

Weber sees action as "normatively oriented." The actor is not seen as a mere responding organism, but as one making an effort to conform with certain ideal patterns of behavior. Because the actor's efforts are only partially successful, there are always elements of

deviation from the "ideal" model. Weber writes:

... The construction of a purely rational course of action ... serves the sociologist as a type By comparison with this it is possible to understand the ways in which actual action is influenced by irrational factors of all sorts ... in that they account for the deviation from the line of conduct which would be expected on the hypothesis that the action were purely rational. (10)

Weber chooses to deal predominantly with the rational ideal types of social action, and he treats any deviation from these types as irrational. Thus, he divides action into rational and irrational types. In so doing, he overlooks many of the important problems which Pareto and Levy highlight in their typologies.

In spite of the significance of rationality in Weber's works, it is rather poorly defined: "Any attempt at an exegesis of this concept is frustrated by the many different connotations which the terms 'rational,' 'rationality,' 'rationalization' assume in Weber's writings." (11) As Kolegar points out, Weber himself was fully aware of the ambiguities in the concept and commented on it several times. (12)

B. Cooley

Prior to World War One, American sociology was preoccupied with the naturalistic, evolutionary explanations of man's organic, psychic, and social development. This process was viewed as a step-by-step shift from the stage of savagery to the stage of civilization. Involved in this theory of social progress was the transition from a non-intentional or genetic basis for behavior to a telic or intentional basis. Telic action was thought to be the result of the emergence of consciousness, and the concomitant acquisition of powers of choice and rationality. (13)

Theories of social evolution are deterministic and ascribe great importance to the environment and hereditary. Cooley shares the basic view of the evolutionists, but argues that man's abilities to reflect, to act rationally, and to choose, are processes which are not subject to the deterministic factors of heredity and environment.

The belief in the rational nature of man is especially reflected in Cooley's concept of "valuation." He argues that when an actor is oriented towards an object or objects in a situation, he uses a scale of values to choose among the objects. The concept of "valuation" thus implies the exercise of consciousness, reflection, and

choice in the achievement of rational conduct.

C. Mead and Thomas

The works of both Mead and Thomas reflect the basic premises of the action school. They are in the vanguard of those sociologists who reject theories of social evolution and the concomitant belief in social progress. For them, the goal of sociology is the explanation of the conduct of concrete personalities in specific social situations. In order to achieve this goal, they develop concepts designed to explain the individual act, and the personal and social interpretations of situations.

Both Mead and Thomas view the individual as autonomous, self-conscious and imaginative, with "... a will by which he can initiate and control his own action and influence the conduct of others." (14) They adamantly oppose the deterministic position of the behaviorist who they feel, denies the existence of feelings, thoughts, and imagination. According to Mead and Thomas, human action cannot be explained by the stimulus-response formula because man possesses a mind, which allows him to choose by the process of symbolization.

Goals are an integral part of the theories of Mead and Thomas. Every individual in a social situation is

trying to attain some end. Their classification of motivation avoids determinism in that Mead's "impulses" and Thomas' "wishes" are considered to be "kinds of strivings" which do not stipulate the external objects by which satisfaction may be obtained. Consequently, neither make hereditary nor early socialization predominant determining conditions.

Thomas and Mead believe that individual conduct is oriented towards significant and socially defined objects, in the external world which may be utilized as means to attain goals. They contend that conduct is preceded by the consideration of what means are appropriate to the attainment of desired ends.

This attainment, according to Mead and Thomas, is somewhat difficult in any situation. The individual can only succeed "... by the exercise of some degree of rational reflection and the choice of appropriate means." (15) Hinkle notes that both authors agree that man is a rational being, whose most significant behavior involves deliberate reflection, planning, and selection. According to Hinkle, the most extensive exposition of rational action is found in Mead's concept of the "individual act" and in Thomas' "definition of the situation." (16)

D. Parsons

Parsons states that the starting point for modern theories of social action is "... the intrinsic rationality of action." (17) Action is analyzed in terms of "means" and "ends." The rationality of action is defined as the scientifically determinable relationship of means to the ends, in a given situation.

In the Structure of Social Action, Parsons conducts an elaborate critique of the works of Marshall, Pareto, Weber, and Durkheim in an effort to synthesize the concepts of these writers into a "voluntaristic theory." The four main elements of this theory are: 1) an emphasis on environment and heredity as the ultimate conditions of action; 2) an emphasis on the relationship of ends and means; 3) an emphasis upon the role of values; and 4) an emphasis on effort in the determination of conduct. (18) Thus, a fundamental law of human action (which Parsons argues is comparable to the second law of thermodynamics) is the law of rational tendencies in social action, which simply means that all social actions move in the direction of increasing rationality.

Despite the importance of this first law of social action, the reader is left to determine for himself

exactly what Parsons means by the term rationality. His definition seems comparable to Pareto's but, if so, he does not say so. One of his attempts to define rationality, (see Appendix A #13) serves only to add to the confusion.

II. A Critique of Action Theory

"Action theory" may be examined in the light of our definition of rationality and the ideal behavior demanded by this definition. The theory is criticized in terms of the four requirements of rational action.

A. The Consciousness Requirement

The theory of social action can be criticized on the following points when considered in terms of the consciousness requirement.

1. In our discussion in Chapter Three of the limitations and impediments of rational action we conclude that it is not known how much social behavior is telic. Social action theory is concerned with telic behavior, but the assumption that goals are consciously held has seldom been tested.

2. Social action theory is further complicated by the lack of data to indicate how frequently individuals

know what they want when they act, even when 'purposes' are given as reasons for their actions.(19)

B. The Empirical Requirement

1. The first problem with the empirical requirement is that, as discussed in Chapter Three, some goals have not been adequately defined and consequently cannot be tested.

2. Values and inner states such as 'intentions,' which supposedly characterize actors, are assumed to be constant. This poses the problem of testing for 'inner states' and determining if they are stable. It is further assumed in action theory that the inner states are related to each other and to behavior. Deutscher has summarized evidence which indicates that both these assumptions need to be qualified before they can be acceptable assertions about the world.(20)

3. There is, as well, the problem of determining the degree to which values motivate men to action. In reference to this problem, Blake and Davis comment:

... a technique (of accepting verbal statements of values as 'real' values) still makes the assumption that values are consciously held and are rationally

connected with norms and conduct -- an old-fashioned view controverted by voluminous evidence.(21)

4. The social action theorist's approach to the problem of empirical dimensions has been in terms of the method of verstehen. Despite the fact that many social scientists have written eloquently about this method, they fail to specify exactly how the operation is to be performed.(22) Abel has defined the method as "... the postulation of an intervening process 'located' inside the human organism, by which we recognize an observed or assumed connection as relevant or meaningful."(23)

The principal feature of this method is the application of personal experience to observed behavior. "We understand an observed or assumed connection if we are able to parallel either one with something we know through self-observation."(24) Abel calls this a case of understanding through "misplaced familiarity."

Be that as it may, the method of verstehen is relevant to the social-action theorist's approach to rationality because it enables him to get "inside the actor," to know his "inner states," and hence to assess the degree to which his behavior is rational. Such

internal states include such factors as "what the actor consciously wants" and the "reasons" he has for choosing particular means to his ends.

Unfortunately the method of verstehen has several limitations: first, it assumes that the observer has a considerable degree of insight into his own behavior and motives, a situation which, even if true, is difficult to validate. Second, it assumes that values motivate behavior, despite the evidence that this is not always so.(25) Third, even if the method of verstehen could be shown to work, it contributes little new knowledge. The explanations it produces are essentially tautological. The existence of "inner states" is inferred from behavior, and the behavior is then "explained" by referring to the inner states. Fourth, verstehen only allows us to gather knowledge about those situations which can be related to comparable situations in our experience. Where the situation is entirely new, the observer has no basis for "understanding." Fifth, if it is a technique, its acquisition ought to be explicable. Cookbooks for verstehen-making are not to be found. Sixth, where "understandings" differ, no procedure for their resolution is prescribed. And last, if a test of knowing is predicting, evidence is yet lacking that "understanding" increases foresight.(26)

C. The Compatibility Requirement

In the discussion of transitivity in the previous chapter reference is made to data which challenges some assumptions of the social action theory. We note that there is evidence to substantiate claims for individual transitivity under certain circumstances. The probability of individual rational action is thus increased. The data are less supportive of group transitivity, and indicate that where group solutions to problems are considered 'superior' this may be only a statistical artifact.

The extent to which individuals order their goals in daily life is unknown. It appears that when efforts are made to order goals through group procedures, intransitivity occurs. Consequently, the probability of rational group action seems unlikely.

D. The Information Requirement

The assumption, by social action theorists, that man uses "appropriate means" to achieve his ends must be qualified. As was shown in Chapter Three, man may have limited access to information; he may be in possession of faulty information; the information may serve

many purposes; and its effective use may be circumscribed by personal and emotional factors. Thus the selection of the "most appropriate means" on the basis of information is difficult. In addition, man may be denied access to appropriate means and be unable to act rationally regardless of his intention and/or his knowledge. (27)

Although rationality is a central assumption of the social action school, neither Weber nor Parsons specifies clearly what he means by the term or what its implications are. It seems possible that Parsons, and theorists of similar persuasion, have been guilty of making assumptions which they then present as unqualified assertions about empirical reality. For example, Parsons assumes that social interaction is "intrinsically rational" but leaps from this assumption to the assertion of a "law of increasing rationality." This law is supposedly an empirical generalization, although Parsons has arrived at it without data to support his assertion. Social scientists, other than social action theorists, however, have been concerned with more precise and testable formulations about rationality. They conclude that the nature of rationality in the empirical world necessitates a

qualification of some of the basic assumptions of social action theorists.

FOOTNOTES: CHAPTER FOUR

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2. Ibid., p. 706.
3. Ibid., pp. 706-707.
4. Ibid., p. 707.
5. Ibid., p. 707.
6. F. Kolegar, "The Concept of 'Rationalization' and Cultural Pessimism in Max Weber's Sociology," The Sociological Quarterly, 5 (1964), p. 360.
7. Ibid., p. 360.
8. D. Martindale, The Nature and Types of Sociological Theory (Cambridge: The Riverside Press, 1960), p. 422.
9. F. Kolegar, op.cit., p. 361.
10. M. Weber, Max Weber on the Methodology of the Social Science (London: William Hodge & Co., 1947), pp. 83-84.
11. Kolegar, op.cit., p. 361.
12. Ibid., p. 361. Kolegar also refers to a useful inventory of passages pertaining to the concept of rationalization in Weber's sociology of religion in a book by Ernst Graf zu Solm (Aus den Schriften zur Religionssoziologie, Frankfurt am Main: Schauer, 1948, pp. 318-323). Unfortunately this book is not available in an English translation.
13. Hinkle, op.cit., pp. 750-755.
14. Ibid., p. 711.
15. Ibid., p. 712.
16. Ibid., p. 712.
17. D. Martindale, op.cit., p. 423.

18. Ibid., p. 424.

19. These comments are the consequence of personal communication with Dr. G. Nettler.

20. I. Deutscher, "Words and Deeds," Social Problems, 13 (1966), pp. 235-254. Also see M. de Fleur and F. Westie "Attitude as a Scientific Concept," Social Forces, 42 (1963), pp. 17-31.

21. J. Blake and K. Davis, "Norms, Values, and Sanctions," in R. Faris (ed.), Handbook of Modern Sociology (Chicago: Rand McNally and Co., 1964), p. 460.

22. T. Abel, "The Operation Called Verstehen," American Journal of Sociology, 54 (1948), pp. 211-218.

23. Ibid., p. 216.

24. Ibid., p. 216.

25. J. Blake and K. Davis, op.cit., pp. 456-484.

26. The points five through seven were brought to my attention in a personal communication from Dr. G. Nettler.

27. For example, Merton's famed typology of deviant behavior is based upon the observation of lack of accessibility of certain segments of the population to appropriate means to their goals.

CHAPTER FIVE

CONSEQUENCES OF RATIONAL AND NON-RATIONAL ACTION

So far, our attention has been directed to the questions of whether or not rational action is possible, and if so under what conditions it might take place. Such questions have generally been considered to be important because it has been assumed that rational action usually leads to more desirable consequences than non-rational action. The purpose of this chapter is to illustrate this assumption and to consider the converse; rational action may have undesirable consequences, and non-rational action may have desirable consequences.

I. The Traditional View: Rationality as Desirable

A. Rationality and Social Progress

By social progress, we mean "... a definite improvement in the well-being of human society. It implies a discernible advance in the enlightenment, prosperity and security of mankind."(1) The idea of social progress provided the impetus for launching sociology as a discipline. Saint-Simon and Comte, who are generally

considered the "fathers" of sociology, were dedicated not only to a belief in social progress, but to an attempt to discover the laws that governed it.

The origins of the idea of social progress are unclear. It probably dates from the seventeenth century, to the works of Bacon and Descartes. Some later theorists, such as Darwin and Spencer, thought progress was based on physical evolution. Most theorists, however, thought of social progress as a result of social factors. The works of Kant, Saint-Simon, Hegel, Comte and Marx had a profound influence on sociological theory. "In the last half of the nineteenth century the idea of progress was accepted as law." (2)

One of the most important ways by which social progress was thought to come about, was by rational conduct. Supposedly, if man could attain enough knowledge, he could apply that knowledge and solve most, if not all, of his problems.

The belief that intellectual progress and social or moral progress are necessarily connected, forms an important basis for the widespread acceptance of the idea of progress The belief that the dissemination of truth must result in progress for mankind in all or most areas of life forms also an important concern

of the early sociologists.(3)

The 19th century view was that knowledge would be attained by the exercise of human reason.(4) This belief that social benefits must necessarily follow from advanced knowledge was unquestioned and rational action was thought to play an essential role in the attainment of those benefits.(5) Thus, Bailey wrote that by

... putting various relationships together (by admittedly oversimplification) we get the following equation: Rationality equals Truth equals Social Utility. It was just on this assumed relationship that sociology had its beginnings and laid its foundation.(6)

The optimistic idea of social progress, so popular in the nineteenth century, was severely dampened by the dramatic events of the twentieth century. When confronted with world wars, depressions, and finally the threat of nuclear war, it became very difficult for even the most optimistic to believe that "all's for the best in this best of all possible worlds." "Few discerning writers any longer dogmatically assert the reality of total human progress."(7) The concept of social progress has been essentially replaced by the more neutral concept of social change.

That few modern theorists adhere to the theory of social progress, does not mean that the idea has lost all significance. In the first place, the idea had indirect influence in that it profoundly affected the work of the early theorists and those works, in turn, have a significant influence on modern thinking.(8) In the second place,

There is, in present day society, a widespread conviction that ... active rationality ... can and should improve a man's lot in this world, a progress which is not necessarily of a unilinear evolutionary kind, but which is somehow cumulative in the way in which science and rational knowledge are cumulative.(9)

Although this thesis is not concerned with direct evidence about how this "widespread conviction" manifests itself among the general public, it is interesting to note that, in at least two specific cases, a belief in its antithesis -- the idea of retrogression -- is used as an index of maladjustment.(10)

The belief in the efficacy of rationality as a means for achieving the general goal of "social progress" is shared by several social scientists. The main manifestation of this conviction is the application of rationality to the policy sciences.

B. Rationality and the Policy Sciences

1. Definitions

Policy sciences may be distinguished from descriptive sciences in that they

... are primarily concerned with control, and wish to aid in the formulation of policies, plans, rules, and recommendations. Their policy prescriptions are based on the descriptive sciences. (11)

Policy sciences are, directly or indirectly, concerned with rationality. The policy sciences include law, education, some parts of economics (12) political science, anthropology, (13) psychiatry and psychotherapy, (14) sociology, psychology, (15) decision-making, and value inquiry. (16)

The basis of the distinction between the descriptive and prescriptive sciences is related to the distinctions between normative and non-normative theories.

Normative theories are of two types, ethical and instrumental. The distinction between the instrumental normative theory and the non-normative theory is illustrated by Homans, who states:

... normative theories explain how men

ought to behave if they are to accomplish certain results, and non-normative theories explain how they actually behave. (17)

Homans is referring to an instrumental-normative theory which outlines how one ought to behave in order to achieve certain ends. This type of theory uses an 'ideal type' which involves the formulation of standards against which actual behavior can be compared.

There is a second kind of normative theory; that which is ethical and which prescribes how one ought to behave regardless. For example, Northrop defines normative theory as the designation of the humanistic and social ends, the correct or good forms of social organization, not yet realized, but at which we should aim. (18)

2. Kinds of Policy Sciences

The distinction between normative and non-normative theory creates the possibility of several types of science and policy sciences. Three major viewpoints are as follows:

- a) That the behavioural sciences are or

should be 'value free', should make no prescriptions or recommendations and should be concerned with what 'is' not what 'ought' to be.

b) that there is no ultimate dualism between 'is' and 'ought', 'fact' and 'value', and that theory and practice should interact in all sciences.

c) that a distinction should be made between the 'descriptive' and the 'policy' sciences.(19)

The first position is clear. It dispenses with the problem of values by eliminating any kind of advocacy. The second position, a controversial one, has been endorsed by some authors such as Northrop(20) and Gross(21). The third is the one accepted, with qualifications, for present purposes.

Comment upon the question of values in social science requires a value judgment. The following is offered as an opinion of what science "ought" to be. It is preferable to distinguish the descriptive sciences from the policy sciences: descriptive sciences should be restricted to the task of accurately describing what "is". Descriptive science, however, cannot prescribe the goals toward which action should be directed. As long as the policy sciences confine their application of science to the evaluation of the effectiveness of various means used

to pursue "given" ends, then they may justifiably be called scientific. It is when the policy sciences claim to possess scientific evidence, that certain ends or values are more desirable than others, that ideology threatens to destroy the objectivity essential to scientific endeavor. When a science ceases to describe the state of the world and begins to say what state the world should be in, it ceases to be scientific. In terms of rationality, it is possible to prescribe scientifically the best means towards ends, but not the ends themselves.

One important source of confusion in the policy sciences when considering rationality, is the tendency to fuse non-normative theory with normative theory, and descriptive science with prescriptive 'science.' This is seen in the writings of some theorists who readily endorse ethical normative theory as science.

For example, Gross implicitly fuses normative and non-normative science when he says: "... we are assuming that people's action ought to agree with what science reveals as the ethical aims of man." (22) In other words, he assumes not only that man ought to act rationally, but that science can reveal what his goals ought to be. Nettler has addressed himself to the problem of the fusion of normative and non-normative theory and

has reduced the confusion by noting that although science is able to indicate probable consequences, there is no scientific way to decide what consequences ought to be preferred. (23) The argument is summarized in Rhee's critique of Popper's Open Society and Its Enemies:

You cannot deduce principles and policies from the facts of science. (Decisions cannot be reduced to facts) ... decisions must be studied differently. That is part of what is meant by saying that they cannot be reduced to facts. I may decide that it is wrong to steal. Then my deciding is a fact, but 'It's wrong to steal' is not a fact. It is something to be believed. It is something that has to be decided -- for or against. And the utterance of it is not the expression of a belief but of a decision. If I try to influence another in respect to such utterances, I try to influence his will or decisions, not his beliefs. I could not disprove his decision that it is wrong to steal, or show that it was mistaken; at least not in the way in which I must show that his beliefs about matters of fact were mistaken. I may point out to him certain consequences. But the 'decision depends on him'. (24)

This argument points out the frequent confusion of the role of scientist with the role of the advocate. In order for a scientist to make valid scientific recommendations of what ought to be done, based upon the ascertainment of what is, it is necessary to have already agreed upon a definition of what ought to be -- and that definition per se can never be considered 'scientific.'

A further illustration of Gross's view is found in the same article where he writes:

To see a fact and describe its occurrence is to appraise it through an angle of vision bound by personal experience, locality and cultural epoch. No person merely observed another's actions without considering their fitness or significance. If human actions were no more than physical motions of no consequence for the observer why should he not prefer to stare into space? (25)

There are several difficulties involved with this statement. First, there are several meanings of the term 'appraise,' and consequently his statement is ambiguous. If by 'appraise' he means, to set a value on, then he is confusing the distinction between fact and value. As Zetterberg has pointed out, one of the paramount problems in sociology has been the proliferation of exactly this kind of fusion of evaluation, description and prescription. (26) Second, Gross cites no evidence to support his assertion that "... no person observes ... without considering ... fitness ..." (27)

3. The Policy Making Process

a) Assumptions of the policy sciences

The efficacy of the policy sciences depends in part upon the validity (or potential validity) of the

assumptions on which they are based. One such assumption is that the consequences of policies are predictable. Kaplan, et al., notes that, "Policy making rests in part on anticipations of the future -- predictions of the conditions which policy must face, and the consequences of and responses to alternative lines of action." (28) The chances of achieving the purposes of the policy will vary directly with the degree to which the predictions are based upon reliable data rather than guess work. Some research had been conducted concerning this issue. Kaplan and associates investigated the use of "expert opinion in polcy making" and concluded that "... confidence in predictions is not necessarily correlated with their success; that predictions made by groups are more likely to be successful than predictions made by individuals; and that the reliability of a prediction can be partly determined by the justifications for it." Although Kaplan's study suffers many limitations, it does indicate that when it comes to predictions the "experts" are in considerable disagreement. (29)

Handy and Kurtz comment on the success of predictions in the discipline of economics, stating that:

Unfortunately, many of the predictions and recommendations of economists all too often merely express personal or group preferences,

biases, hopes, and reflections of mood. For example, in the nineteen-thirties it was widely held that the USA had a mature economy, having reached the apogee of its growth; and in the immediate post-World War II period many were predicting an immediate depression; but both predictions were later proved false. But if the attempt of economists to frame vast predictions and recommendations about the whole state of the economic system have frequently been ill-advised, this should not imply that there have not been some successes in predictions and recommendations based on probabilities in certain restricted areas. For example, policy advice in particular firms or industrial areas, or specific recommendations for government, such as in the field of taxation, have sometimes been based on scientifically warranted conclusions.(30)

A second assumption upon which some of the policy sciences are based, is that truth is preferable to error. Northrop contends that science is able to validate normative theory and consequently solve all of man's ideological conflicts.(31) He agrees with Gross that man's problems can be solved through the revelation of truth by scientific means. However, other writers have held that the 'lie' is useful. Arendt, for example, argues that, at least for those policy sciences involved in politics, the 'lie' is necessary and important, and that here men often prefer error to truth.(32) She comments: "... factual truth, if it happens to oppose a given group's profit or pleasure, is greeted today with greater hostility than even before."(33) (This assumption will be considered

in detail in the section on the consequences of non-rational action based on ignorance).

A third assumption of the policy sciences is the presence of clear objectives. However, as Rothwell notes, the essential objectives may be " ... permitted to rest upon assumptions that have been inadequately explored."(34) As an example, Rothwell cites the American objective of "self determination for all nations and all men." This objective " ... stems from the theories of our founding fathers ... which need systematic re-examination in the light of our increased knowledge of human relations."(35)

Man's intrinsic rationality is a fourth assumption of most policy sciences. This assumption can be expressed in two ways: either that mankind in general performs rational acts; and/or, that science is rational and can effectively solve problems.(36) Rock expresses the opinion that " ... to cope with ... policy problems ... effectively and rationally ... requires a vast and organized contribution from the social sciences."(37) Chapter Three, which was concerned with the limitations of and the impediments to rationality, leads us to approach such assumptions with a considerable degree of caution.

b) The authors of social policy

One of the issues in the policy sciences is the problem of who is to decide which policy is appropriate. As might be expected, there is very limited agreement on this issue. In the first place, the decision to utilize science in formulating policy decisions is a policy decision in itself. Merton and Lerner outline the public images of the social sciences and conclude that these images range " ... from the view that social science is merely private opinion masquerading as science to the faith in its rigorously objective quality." (38)

In the second place, the issue of who decides policy has implications for those individuals who are oriented toward the democratic way and those who believe that problems should be resolved by 'consensual participation.' If the situation occurs, and it is not uncommon, where the public is not in agreement with the definitions of some of the problems, the solutions to them, or the helpfulness of social scientists, then the would-be policy makers, who profess a democratic orientation, might take the public's wishes into account even if they privately recognize that some problems, such as those which call for manipulation, might not be efficiently 'solved' by

following the opinions of the majority.

c) Science and Social Policy

Individuals who take the position that social science should be used in the formulation of social policy, are expressing faith for which, to date, there is almost no supporting evidence. Merton has noted, that in the absence of a systematic study of the efficacy of social science methods for policy making, we have very little information regarding the success or failure of policy sciences. (39)

d) The Executors of Social Policy

An additional problem of the policy sciences is the 'slippage' between policy, as it is prescribed by policy makers, and policy as it is actually executed. As Becker notes, where such slippage occurs, some goals must be frustrated. (40)

Nettler is concerned with this problem in his study entitled, "Ideology and Social Welfare." (41) He finds that the policy formulators, as compared to the policy implementers, are less deterministic, more punitive, and less perceptive of inadequacies in services. The policy sciences are confronted with the problem of different

interpretations of how specific policies should be implemented.

e) Summary

The policy sciences can legitimately be considered "scientific," only if they restrict themselves to policy regarding the most effective means for the achievement of given ends, and do not attempt to prescribe those ends. When policies are implemented, they are faced with several problems which tend to undermine their effectiveness. These problems include such things as debatable assumptions, (e.g. that man is rational, that truth is preferable to error, that accurate predictions can be made, and that valid objectives are formulated); the question of who shall formulate policy; the question of the desirability of utilizing social science in formulating that policy; and the problem of the "slippage" between what the policy makers intend and what is implemented. These general points about the use of "rationality" as a model for public policy formulation, can be illustrated in the cognate studies of the sociology of law, criminology, and corrections.

4. Criminology and Social Policy

From the definitions given above, it follows that the formation of rational social policy necessitates the use of empirically validated information in the achievement of non-transcendental goals. Throughout criminological literature, appeals are made for the utilization of rational policy formulations. Thus, Conrad states that " ... the time has come to rebuild the correctional process on a more rational basis." (42) Similarly, Gold and Scarpitti note that the task of sociology is to understand the intervention techniques which are currently being applied to " ... rational control of the more widely recognized social problems in our society ..." (43) Further, Silvey argues that if law is to be regarded as "good" law, it must be based on two qualities: the "sovereign will" and "rationality." (44) Appeals for rationally derived criminal laws are also found in the work of Glueck, (45) while Gigeroff (46) and Selznick (47) appeal for laws based upon scientifically validated information.

To appeal for rational social policy is easy: to formulate and apply such policy results in a variety of problems. When actual attempts are made to select rational social policy in criminology, two general kinds of problems arise; the number of conflicting objectives in

criminology, and the lack of data or information because of the existence of several myths. Myth is being used in this context to refer to collective beliefs built upon little or partial information. For the most part, myths are beliefs which rest upon unsupported assumptions. Examples and illustrations of the conflict of objectives and several myths are presented below.

a) The Conflict of Objectives

The concept of rationality entails the notion of transitivity and when goals are many, there is an increased probability of conflict among them. Rational social policy is impeded by the presence of conflicting goals. For example, Allen notes:

No social institution as complex as those involved in the administration of criminal justice serves a single function or purpose. Social institutions are multipurposed. Values and purposes are likely on occasion to prove inconsistent and to produce internal conflict and tension. A theoretical orientation that evinces concern for only one or a limited number of purposes served by the institution must inevitably prove partial and unsatisfactory. (48)

The conflict among the objectives and purposes of criminal law is illustrated by the debate between Lord Devlin and Hart. (49) This debate is about the question of the degree to which the law is or should be a reflection of morality. The debate is an old one, with one school of

thought represented by Mill, Bentham, the Wolfenden Report, Schur and Hart.(50) The opposite view is supported by Stephen and Devlin.(51) This issue is illustrated from the Wolfenden Report which states that the function of the criminal law " ... is to preserve public order and decency, to protect the citizen from what is offensive or injurious, and to provide sufficient safeguards against exploitation or corruption of others."(52) Devlin, on the other hand, contends that society has the right to punish immorality as such. Devlin asserts that social morality is the cement of society and that without a common morality society would disintegrate.(53)

The debate between Hart and Devlin surrounds several basic issues such as, the concept of society, the consequences of punishment, the degree to which society has a "common morality," the relationship between the law as a system of sanctions and its consequences, the problems of enforceability, and the question of the degree to which law is universal. Both Hart and Devlin defend their respective positions with frequent reference to consequences, but in most instances, no data are cited to support their contentions.

Further illustrations of conflicting goals are found in the work of Waelder, who notes that the

several purposes of penal regulations, viz. individual prevention and rehabilitation, are often in conflict.(54) Waelder draws up a typology of conflicting goals, arguing that rehabilitation conflicts with individual prevention, rehabilitation with retribution, retribution with general deterrence, individual prevention with rehabilitation, individual prevention with general deterrence, and finally that rehabilitation conflicts with general deterrence.(55)

The objectives of imprisonment serve as another example of conflicting goals in criminology. For example, Becker observes that

... a characteristic feature of the prison as a social system is that it is designed to fill a multiplicity of goals and there is likely to be conflict among them.(56)

Sutherland and Cressey have asserted that the several objectives of imprisonment are seen in the emphasis on, the reform and treatment of the offender, the protection of society, retribution, and the reduction of crime rates. The attempts to realize these different aims often result in conflict.(57) Further examples demonstrating the difficulty of achieving many goals are in the works of Miller, who illustrates how inter-institutional conflict acts as a major impediment to the prevention of

juvenile delinquency.(58) Other examples of conflicting aims in imprisonment are found in the writings of Robinson,(59) McCleer,(60) Cressey,(61) and Ohlin.(62)

The consequences of conflicting objectives in criminology are further exemplified by the slippage between policy formulation and policy implementation. Even if one has adequate information as to the appropriate means, and even if objectives are clear and free of conflict, it remains possible that these means will not be implemented. Nettler has demonstrated this 'slippage,'(63) while Conrad observes that "In the correctional world, the standards set by policy makers and their day-to-day execution almost never coincide."(64) The difficulties of policy implementation are elaborately discussed by Schwartz, whose attempts to implement an anti-delinquent program resulted in "... much frustration and little satisfaction."(65)

Finally, even when the policy has been implemented as its formulators would like, there remains the possibility of unanticipated consequences of the policy action. In some cases, these unanticipated consequences are in conflict with the original goals. For example, one of the possible consequences of official action is stigmatization, which may deflect the policy action from its intended goals.(66)

Another example of possible unanticipated consequences is noted by Becker who contends that with the rise of humanitarian and therapeutic processes, there has been a corresponding increase in the use of indeterminate sentences. In some cases, this policy has resulted in prisoners serving sentences at least as long as those served under "more punitive doctrines." (67) Szasz has argued similarly, that the good intentions of therapy-minded criminologists often jeopardize the civil rights of offenders. (68)

The above few comments have offered some examples and illustrations of the many goals of criminology. Where there is such a multiplicity of objectives, there is the additional probability of cross purposes. Some conflicting objectives have been noted. Rational social action is impeded where the objectives include goals which conflict or where the effort is directed toward such a number of goals that any one is only minimally achieved.

b) Myths in Criminology

The selection of appropriate means to achieve objectives in criminology depends upon information which reveals the consequences of the various social policies. The selection of means in criminology is impeded by several

myths which rest upon unsupported assumptions. Myth is used in the dictionary sense of a collective belief that is built up in response to the wishes of the group, rather than an analysis of the basis of the wishes. "Being rational," as it has been pointed out, means knowing "what one is doing;" this, in turn, means that assumptions are not merely assumed, but adequately grounded in empirical observation.

One of the most pervasive myths today is that criminology is a science. Criminology aspires to be a science and to use the scientific method.(69) Although there is not agreement on all of the characteristics of the scientific method, there is consensus that science controls personal bias in observation.(70) When bias persists, one may assume that the "science" is imperfect or that the subject-matter is recalcitrant. Both possibilities are present in the policy recommendations of criminologists. Social scientists may be biased in several ways, as shown by Furley, whose analysis of the first five issues of Social Problems, finds that sixty-three percent of the articles contain value judgments which distort observation.(71) The preferences of criminologists are illustrated by an examination of some of their literature.

This literature reveals several assertions which are unsupported by data and statements which beg the question. For example, Gold and Scarpitti make the following statement:

Along with the growing public awareness of the existence of persistent problem-generating behaviour, there has also been a growing public recognition that the course of many social problems can be significantly altered through strategic interventions involving various sorts of collective action. (72)

The above quotation is misleading in several ways. First, the authors neither cite data nor provide references to studies which support their contention that there is "growing public awareness" and "recognition" of both social problems and their solutions. Second, such words as "significantly" beg the question, for the question is not merely whether problems can be "significantly altered" willy-nilly. Destruction is easy, as the race-rioters have recently reminded us, and destruction is one "significant alteration" of a social problem. What is crucial to the Gold-Scarpitti assumption is the glibly iterated idea that the "alteration of the problem" will have the result supposed as a consequence of the means proposed. Producing change, and producing effects rationally are different things. (73)

A second example of unfounded assertion is found in the writing of Martin, who, in drawing conclusions about aftercare, states that "... with imagination, it may help to sustain those (personal relationships) which exist ..." (74) This conclusion may be overly optimistic, in view of the fact that Martin states only a few lines earlier that the information on aftercare suffers from such deficiencies that it is unworthy of discussion. Martin's "may help" becomes even more suspect in the light of his observation that it has yet to be determined "... how much effect this assistance appears to have." (75) Martin's discussion of aftercare is also less than scientific as the result of his use of such expressions as "with imagination" which beg the question.

A third example of "fact-free" assertions is found in the writings of Conrad. In a disucssion of the problems of reformation and control, Conrad states:

Nobody evaluates the effectiveness of correctional service by the criteria of mere control. What the community wants is obvious enough from the incessant attention to the statistics of recidivism. It wants change -- the change of the offender from a person whose behaviour is intolerable under the normal conditions of community life to a person who can function within the limits of public tolerance. (76)

The above paragraph is misleading in several ways. It contains at least two conclusions which Conrad does not support: 1) We have no measure of the number of persons who evaluate correctional procedures by the criterion of "mere control," and Conrad supplies no data; 2) his assertion about "what the community wants" is also moot and free of evidence. (77)

The above examples have been cited to illustrate that there are criminologists who advocate rational social policy but whose work shows the presence of bias in the form of unsupported conclusions and phrases which beg the question. As long as criminologists practice advocacy and allow bias to stand as "truth," the discipline can lay little claim to being a "science."

A second myth in criminology is that punishment does not deter. Some contemporary criminologists have concluded that the use of punishment as a deterrent is scientifically unsound, and have advocated its elimination. (73) A statement of this position is found in the writings of Barnes and Teeters who say: "The claim for deterrence is belied both by history and logic . History shows that severe punishments never reduce criminality to any marked degree." (79) Toby has surveyed eleven recent text-books in criminology and concludes that readers of

of these books might " ... infer that punishment is a vestigial carry-over from a barbaric past and will disappear as humanitarianism and rationality spread." (80) The belief in the unsupported assumption that punishment does not act as a deterrent reflects itself in policy recommendations like those of Conrad who suggests that, "The task of corrections advance is clear: to reduce to an absolute minimum the use of punishment through alternative positive measures." (81) Criminologists who make policy recommendations based upon the assumption that punishment does not act as a deterrent have been unable to provide answers to the following relevant questions.

(1) What is the effect on the lawful person when an offender is punished? As yet, there is no empirical evidence or test to indicate the degree to which "non criminals" are deterred from committing offences either by the threat of punishment to themselves or by the punishment of offenders. For example, Cressey states that,

it must be emphasized that support for continuing the punitive reaction to crime or for specifically implementing this reaction by imprisonment is always based on some value which punishment is assumed to have. We do not know that imprisoning men deters others, reinforces anticriminal values, corrects criminals or in some other way promotes social solidarity. However, neither do we know that inflicting pain by imprisonment or some other

means is an inefficient system for maintaining, or restoring, social integration. (82)

(2) Is there any evidence that the punitive and non-punitive approaches are in fact incompatible? The contention that these positions are irreconcilable is plausible, but evidence is lacking. Those who hold the position are also confronted with the possibility that while the punishment of offenders might deter others, it might impede the reformation of the offender. Also there is evidence that punishment does deter in some instances. (83)

(3) Even if it could be satisfactorily shown that punishment does not effectively deter criminals from the commission of further crimes, is it logical to assume, therefore, that punishment does not deter "non-criminals" from the commission of crimes? Some criminologists are guilty of just such a non sequitur. The previous quotation from Barnes and Teeter is a case in point. They argue that because history and logic "show" that punishment does not deter criminals, it is therefore reasonable to conclude that punishment does not reduce criminality. (34) Such a conclusion surely does not follow. Our information about criminals does not necessarily provide a good basis for inferences about non-criminals.

A third myth in criminology is that treatment of offenders is a better method of reforming them than using punitive methods. The treatment methods are often referred to as rehabilitation techniques and include parole, probation, and imprisonment with special reformative programs, such as vocational training and individual and group psychotherapy. "Each of these manoeuvres is designed to help criminals become non-criminals, and thus, each is viewed as rehabilitative." (85) The literature in criminology is replete with appeals for the treatment of offenders. For example, Caven states, under the rubric, "Scientific Approach to Reformation":

Against this congealed and inert background of punishment harshly applied to all offenders, of crude old prison structures, of complicated and uncoordinated machinery of law enforcement, we may place present scientific knowledge of how to go about helping people....(86)

Caven notes that the knowledge of these helping techniques has not yet been fully appreciated by criminologists, but she does not question the scientific nature of this knowledge. A similar position is taken by Sutherland and Cressey who argue that punishment is inefficient and that treatment should be substituted as a reformative technique. Sutherland and Cressey argue further that treatment is more efficient and scientific than punishment:

Punitive methods of dealing with criminals, then, seem relatively inefficient. Because of this apparent inefficiency ... the scientific procedure of individualization is slowly being substituted ... Our knowledge of human behaviour is extending rapidly and the success of treatment methods also seems to be increasing. (87)

The statements of Cavan and Sutherland and Cressy seem more optimistic than the data itself warrants, and the myth that treatment works is challenged by the findings of several studies. First, the data will be presented on the general issue of treatment, and second, we will examine within the treatment school the specific myth that psychotherapy is an effective way to help reform offenders. Those who believe in the effectiveness of treatment for the reformation of offenders should consider the following relevant questions.

(a) What is the evidence of the comparative effectiveness of treatment versus punitive approaches? There seems to be very little evidence either way. Becker notes that the conflict of goals may be one reason "... why careful studies designed to test the effectiveness of social case work and counselling programs in institutional settings so often fail to demonstrate real effectiveness." (88) Conrad also notes the failure of correctional programs to test their effectiveness. Summarizing a survey of

international correctional practices, Conrad states that social policy rationales designed to " ... equip offenders to 'lead a good and useful life on discharge ...'" were rarely tested and that " ... neither method nor resources were available to evaluate and refine methods of treatment."(89) In addition criminologists must contend with the conclusions of Hood who, in reporting to the European Council on the Effectiveness of Punishment and Treatment, states that research into the comparative effects of various sanctions suggests that there is very little difference among the overall effects of various kinds of responses to crime. When consideration is given to differences in the compositions of the populations being studied, probation is found to bring about almost the same results as institutional treatment; a short period of treatment is found to produce about the same results as a long one; and traditional disciplinary institutional treatment on the whole produces results similar to those produced by treatment in modern, therapeutically oriented institutions.(90)

(b) If reformation is possible, what model shall be selected for the offender to emulate? Cressey has called for the use of the differential association theory in the reformation of criminals.(91) In a critique of Cressey's

argument, Nettler asks what role will be used in the reformation of offenders. He notes that criminality in many respectable professions narrows the number of possible role models to a very few. (92) If we are to recommend reformation of the offender , through a process of differential association, it seems reasonable to ask who will serve as the offender's lawful model and how differential association with him can be effected.

(c) Is there any evidence to indicate what approaches other than treatment or punishment may be effective? The proponents of both the punitive and treatment approaches do not seem to realize that there is some evidence that deviants may be better off left alone. For example, Shannon notes:

Research indicates that no group of profession has demonstrated the ability to effectively deal with deviant behaviour; research shows that treatment results in no greater improvement than that which accrues by simply leaving alone persons with a behavioural problem. (93)

(d) Does psychotherapy work? Several proponents of the treatment approach advocate the use of psychotherapy for the reform of the offender. For example, Bloch and Geis say that the acceptance of therapeutic resources

... of a number of different kinds, at the direction of the courts (the psychiatric services of such an organization as the Association for the Psychiatric Treatment of Offenders is one example) can pave the way to a broader sense of responsibility. (94)

The literature includes appeals to the desirability and efficacy of psychotherapy for the reformation of criminal offenders. Caven calls for the assistance of the psychiatrist (95) while Sutherland and Cressey note that the treatment used in individual cases is often psychotherapy:

Individual psychotherapy, as a system of reforming criminals, is perhaps the best example of a current treatment method based upon this assumption. Social case work has been greatly influenced by psychiatry, and as a result most of the 'diagnoses' made by social workers attached to courts, prisons, and other agencies dealing with criminals are made in clinical terms, just as are most of the diagnoses made by psychologists and psychiatrists. (96)

The effectiveness of psychotherapy on the reformation of offenders is doubtful, however, and there is a considerable body of literature which argues that psychiatric diagnosis is unreliable. Eysenck has summarized a number of studies of psychiatric diagnoses, and states in regard to one such study:

If one recalls the findings of Holtzman and Sells (1954) that the clinicians were consistently wrong in their predictions, but that they agreed remarkably well among themselves in their errors, then one can hardly escape the suspicion that something must be amiss in available theories typically employed by clinicians. (97)

Similarly, the findings of Asch, who finds that on major categories of diagnoses psychiatrists can agree on only forty-six percent of the cases. In minor categories there is only twenty percent agreement. (98) Stouffer reports that in a survey of recruitment diagnoses for the American Army, discrepancies in diagnoses were erratic. (99) A comprehensive survey of the literature has been conducted by Hakeem, who not only concludes that psychiatric diagnoses are unreliable, but that:

It is astounding that judges and correctional officials continue to view psychiatrists as experts on human behaviour when there is considerable experimental and other research which shows laymen superior to psychiatrists and associated personnel in the judgment of people's motives, emotions, abilities, personality traits, and action tendencies. (100)

In addition to the literature noting the unreliable nature of diagnoses, there are doubts about the psychiatrist's ability to 'cure' his patients. Kelley notes that readmission rates to hospitals for schizophrenics are high, (101) while Freeman and Simmons find that patients released from well-staffed, highly reputed hospitals "... did not differ in performance level from those released from intermediate or low-reputational hospitals." (102) Similarly, a study designed to test the effectiveness of psychotherapy compared with a control group

of similar untreated psychotics showed that there was no greater improvement for the group receiving psychotherapy. The experimental group was discharged no sooner than the control group, and a three-year follow-up study showed that there were no differences between the two groups in terms of community adjustment or readmission rates. The study also noted that despite the fact that the group receiving psychotherapy was hospitalized on an average of three months longer than the control group, they did not make any better post-hospital adjustments. (103)

The foregoing paragraphs have summarized some of the data concerning psychiatric diagnosis and the efficacy of psychotherapy in the treatment of offenders. There is a lack of evidence to support the idea of the efficacy of psychotherapy, and consequently belief in its usefulness is tantamount to myth.

In conclusion, then, we find little evidence to support claims that criminal law and criminology are scientific and rational. Although the literature contains references to the consequences of various social policies, supporting data is lacking. Further, the conflict of goals and the presence of several myths impedes the development of rational social policy in these areas.

II. An Alternative View

Many views of rationality concur that rational acts are generally desirable and non-rational acts, undesirable. The emphasis on this view, characterized in part by the association of rationality with social progress (generally via the policy sciences), has led to the neglect of an alternative view -- that at least under some conditions, non-rational action can be desirable, and rational action, undesirable. For example, some happy action is purely expressive, that is, one does not engage in it with the intent to have fun. Such intention may kill the expression. (104)

A. Some Desirable Consequences of Non-Rational Action

As was shown in Chapter Five, there are some limitations to the rational model. One of the more common of these factors is ignorance -- the lack of an informational basis upon which to make decisions. When an actor is ignorant, that is, when he does not possess information, his actions are non-rational. The following section will be concerned with desirable aspects of that ignorance. Specific allegations of ignorance, as in ethnocentrism and stereotyping, are not discussed separately. (105)

It is important to emphasize again that, although ignorance is a very important factor in non-rational action, it is not the only one. Although many sociologists occasionally imply in passing that ignorance may be desirable for some social unit, Moore and Tumin and Schneider address themselves directly to the problem.(106) Moore and Tumin's conclusion is similar to that implicit in a great deal of folk wisdom.(107) They say that:

... ignorance must be viewed not simply as a passive or dysfunctional condition, but as an active and often positive element in operating structures and relationships.(108)

Some ways in which ignorance may be desirable are presented below. The discussion is not exhaustive, but merely suggests some alternative approaches.

1. Ignorance may be desirable in that it reinforces traditional values

Malonowski, like Durkheim, appears to " ... emphasize ignorance as a "preservative."(109)

If empirical truth is given an unlimited liberty for its development, it may prove exceedingly injurious to many 'illusions' which are necessary for the existence of values in a group.(110)

Moore and Tumin point out three processes involved in the reinforcement of values. First, ignorance of other cultures is necessary to preserve traditionalism. Sub-cultures often try to restrict the contact of their young people with the way of life of the majority culture. Second, ignorance of normative violations may prevent the violation of those norms. If we do not want children to be deviant it may be necessary to keep them ignorant of the extent to which "crime does pay." Third, ignorance may be desirable to the extent that its reinforcement of values serves to "... heighten the sense of community through induction of subservience of individual to group interests."(111)

2. Ignorance may be desirable because it allays anxiety and fear

One of the most extensive analyses of this role of ignorance is found in Maninowski's Magic, Science and Religion. Magic (a kind of ignorance) provides subjective and sanctioned security, and serves to reduce anxiety.(112)

Schneider suggests that:

Ignorance is eufunction in cases or conditions in which knowledge would mean the revealing of information that would be directly or simply painful to have and no other significant consequences would occur.(113)

Stryker analyzed role taking and adjustment of parents whose emotional involvement with their offspring was not "adequately" reciprocated. He found that the parents are more likely than the offspring to resist and distort evidence of discrepancies between parental and filial attitudes. When parents recognize the discrepancies, their problems of adjustment become intensified. Stryker's study provides some evidence in support of the idea that ignorance can be desired in order to protect and conversely that "... at least under certain circumstances, knowledge of others can be maladjustive." (114)

Davis has studied the problem doctors have in deciding how much information to give to parents of patients. In his study, concerned with parents of victims of paralytic poliomyelitis, he notes that parents were very seriously disturbed by knowledge of the exact nature of the fate awaiting their children. (115) It is suggested that such knowledge might be undesirable.

3. Ignorance may be desirable because it permits the continuation of happy consequences which are unrecognized

This argument poses the basic query: "What are the effects of the recognition of previously unrecognized consequences?" (116)

A study by Clark of the "cooling-out" process in higher education provides an example of this problem. Junior college students, wishing to transfer to four year institutions and found lacking the necessary ability, must be "reorientated". Clark notes that the cooling-out process "... must be kept reasonably away from public scrutiny and not clearly understood by prospective clientele, since otherwise ... the organizations' ability to perform ..." would be damaged.(117) The cooling-out by the administration is beneficial for the students and for the institutions of higher education, but its success depends upon the ignorance of both the students and the public of the role of junior colleges.

A second way in which ignorance is necessary for the continuation of consequences involves the reaction expressed in the phrase: "If I had known what this would lead to, I would not have done it"(118) Knowledge of the consequences of an action may result in the stopping of that action. Schneider showed cognizance of this problem when he wrote:

Ignorance is eufunctional in cases or conditions in which the acquisition of knowledge ... would bring awareness to the previously ignorant that they were being handled in such fashion to bring about some end defined as socially necessary or desirable by the manipulators or others ... (and) would

hamper the realization of the end because those becoming cognizant of the manipulation would react resentfully and resist the end on the ground that it failed to benefit them. (119)

Schneider provides an excellent example of this when he points out that the premature awareness of the client of the goals of therapy may have "painful results," and may "endanger the entire therapeutic enterprise." (120) A marriage counsellor, who has decided that the "best" solution for his clients is a divorce, may be preparing them for such a step. If he were to explain this to them directly, however, they might leave the therapeutic situation.

Ignorance that allows desired, but unrecognized consequences, is an example of "gain through indirection." This gain, discussed at length by Schneider, is an aspect of the positive consequence of ignorance. (121)

4. Ignorance may be desirable as a preservative of privileged position

A man may gain social status and its concomitant rewards and privileges, if he possesses special knowledge. If some knowledge is to be valuable, it must be kept secret. There are several examples of this phenomenon.

a) Protection of the specialist

The specialist attains his privileged position through the sale of his knowledge. In order to keep that knowledge marketable, he must achieve two ends: first, he must keep both his consumers and his competitors ignorant, so that his special knowledge does not become common knowledge and worthless, and second, he must avoid exposing his "tricks of the trade" to his consumer. Should the consumer learn too much about the specialist's field, or should the consumer or the competitor learn his unique knowledge, the position of the specialist would be in danger.

b) Resentment

If those who are underprivileged are unaware of the discrepancies between their situation and that of the more privileged, rebellion may be minimized and the positions of the privileged protected. Ignorance of something better may help to prevent discontent and encourage the passivity of the "have-nots."

5. Ignorance may be desirable as an instrument of social control

It is commonly asserted that knowledge about deviance is conducive to the performance of deviant acts.

Although this assumption has not been adequately tested, it has formed the basis for a wide range of social and legal restrictions designed to maintain public ignorance. For example, censorship laws restrict access to pornography and crime comics, in the hope that restricting individuals' knowledge about sex and crime will deter sexual and criminal acts.

Whether or not knowledge leads directly to deviance we do not know, but we know that certain forms of knowledge greatly increase the efficiency with which deviant acts may be performed. For example, the study of criminal careers reveals that knowledge of the mechanics of a life of crime is a necessary part of the training of a professional criminal. If, in our education system we constantly assume that knowledge is necessary for the adequate performance of some social roles, we must also consider the possibility that knowledge may be necessary for the performance of deviant social roles. Perhaps part of the "price" of social conformity is ignorance of the ways of nonconformity.

6. Ignorance may be necessary for certain social policies to work

Van den Haag and Ross have noted that ignorance may be necessary to check some forms of economic

instability. More specifically, they cite Lerner, who argues that knowledge of economic principles which will check inflation may result in individuals and business doing the opposite of what is needed. In this case then, ignorance may be desirable for the implementation of social policy designed to avoid inflation. (122)

Further examples of the desirable consequences of ignorance could be added to the six presented. We have not attempted to outline all possible cases but have tried to give some support to the hypothesis that ignorance is, under some conditions, desirable for society and/or some individuals.

It is, of course, recognized that in many respects ignorance is undesirable. The task for the social scientist is not solely to examine the deleterious effects of ignorance, but to address himself to the questions of what its consequences are for which social units, under what conditions. The task of the numerous policy makers who seek to implement the findings of social science may be not to dispel ignorance on all possible occasions, but to be cognizant of the possibility that some situations are better left alone.

B. Undesirable Aspects of Rational Action

Social scientists and laymen alike seem to assume that if man acted in a rational way the world would be a better place to live in and the lives of individuals would be generally happier. As we have shown, the rational model is of limited application. Even in those instances where a careful attempt is made to use the most appropriate means for the achievement of empirical goals, the result of such rational action may be undesirable for the actor or society or both.

The paradox that uncomfortable consequences may flow from rational endeavor can be suggested as follows:

1. Attempts to be rational may be undesirable in that they lead to the discovery of information which in turn may destroy desirable ignorance

Thus, all of the foregoing hypotheses about the desirability of ignorance (with the exception of the first one), may be rephrased in terms of the deleterious consequences of knowledge. Additional knowledge may be undesirable in that it weakens traditional values, (123) increases anxieties and fears, (124) precludes the continuation of some happy, but unrecognized consequences,

or threatens privileged status.

2. Attempts to be rational may lead to finding information which is undesirable because it detracts from the solution of the problem

Roucek summarizes a study of this phenomenon: "Even attempts at constructive reform may merely confuse the public and end in inactivity." (125) A similar opinion is reflected in the military motto: "It is better to act decisively on a wrong decision than indecisively on a right one."

A second way which information-seeking may provide undesirable consequences, is through the collection of the wrong kind of knowledge. Such "backfiring" might occur in some attempts to solve problems of interpersonal relationships. One approach, often encouraged by marriage counsellors, is to attempt to increase the clients' knowledge of each other without considering the possibility that a patient's reaction might be, "Now that I understand you, I like you even less!"

A third way in which the seeking of knowledge may be undesirable involves the restriction of alternatives, rather than the proliferation of them. Argyris comments:

Turning to interpersonal relations, it is not necessarily true that if rules are stated clearly interpersonal confusion is minimized. In the world of the pyramid structure, clearly defined relations can create problems especially for the subordinates who tend to experience a world full of clearly defined rules and regulations as a world tending toward submissiveness. If their boss is an autocrat, clear rules and regulations may easily serve to make it more difficult for the subordinates to behave effectively. One is reminded of Melville Dalton's law of organization. "There is always a way of getting around a rule -- find it!"(126)

In short, knowing a rule, or other limitations on conduct, may bridle innovation and action useful to the person or the system.

3. Rational conduct may be undesirable because its goals are detrimental to the society

Thus, the actions involved in building and testing the perfect H-Bomb may have been rational, but they might well be disastrous for society. Similarly, Hitler may have been quite rational in implementing his goal of eliminating all Jews: "The essence of rationality consists of the demonstrated appropriateness of means to ends. But this ... says nothing about the 'goodness' of those ends nor of the means."(127)

In sum, it is probable that, if it were possible to act consistently, that is, if all human objectives were

in harmony, and if all the information required for the assessment of adequate means were at hand, and none of that knowledge mere "noise,"(128) then the resulting action might be both desirable and rational.

The conclusion to be drawn from our review is that, contrary to the usual generalizations, there are a number of occasions when non-rational action must be considered "desirable" and rational action must be recognized as "undesirable: "... no social order could be entirely made up of rational behavior, nor could it be as rational as it seems to the members of the society."(129)

FOOTNOTES: CHAPTER FIVE

1. H. Barnes, Historical Sociology: Its Origins and Development (New York: Philosophical Library, 1948).

2. R. Bailey, Sociology Faces Pessimism (The Hague: Martinus Nijhoff, 1958), p. 29.

3. Ibid., p. 25.

4. Bailey comments that: "... underlying the idea of progress and implicit in it was an assumed automatic linkage between reason, knowledge, and social progress or to state it differently between rationality, truth, and social utility." Ibid., p. 32.

5. "Hegel has the idea that progress is rationalistic and that logic is the basis of the world-process." H. Barnes, An Introduction to the History of Sociology (Chicago: University of Chicago Press, 1948), p.59. For Marx, "The movement toward freedom is the significant point of human history, and there is an important link between rationality and freedom." R. Bailey, op.cit., p.28.

6. Ibid., p.33.

7. H. Barnes, Historical Sociology: Its Origins and Development, op.cit., p. 178.

8. Discussions of the works of these and other theorists can be found in: H. Barnes, An Introduction to the History of Sociology, op.cit., pp. 38-41, and R. Bailey, Sociology Faces Pessimism, op.cit., pp. 1-33.

9. B. Barber, Science and the Social Order (New York: Collier Books, 1952), p.99.

10. One of the items in Srole's anomie scale is: "Generally speaking, the life of the average man is getting worse not better." Agreement with the statement is considered "anomie." Also, see R. Sanford, H. Conrad and K. Franck, "Psychological Determinants of Optimism Regarding the Consequences of the War." The Journal of Psychology, 22 (1945), pp. 207.235.

11. R. Handy and P. Kurtz, A Current Appraisal of the Behavioural Sciences (Great Barrington, Mass.: Behavioural Research Council, 1964), p. 11.

12. The concept of rationality is given its strongest support in economics. Simon states: "... a theory of administration or of organization cannot exist without a theory of rational choice." Economic man is purported to be of two species: the consumer and the entrepreneur. Classical economics assumes that the consumer wishes to maximize his utility while the entrepreneur wishes to maximize his profits. The theory assumes both of them to be rational ... in that alternative choices are simply dealt with by the maximization of profit or utility." H. Simon, Models of Man, Social and Rational (New York: John Wiley and Sons, 1957), p. 196. Economics have given vigorous impetus to the interest in rational behavior which is seen in games theory and in statistical decision theory. In 1945, von Neumann attracted attention to the theory of rational choice with reference to games theory. J. von Neumann and O. Morgenstern, Theory of Games and Economic Behaviour (Princeton: Princeton University Press, 1947). Neyman, Pearson and Wald have suggested theories of rational decision based upon their re-interpretation of the theory of statistical tests. Simon has challenged these rather arbitrary concepts of rationality by asserting that they seek to, "... direct the theory of human choice on the unrealistic assumptions of virtual omniscience and unlimited computational power." H. Simon, op.cit., p. 202.

13. Concern for the role of rationality in man's behavior is found also in anthropology. Kroeber states that if anthropology is to attain the level of making significant generalizations, then it must be able to demonstrate: "Universal principles of cultural dynamics, and concepts embodying rational norms capable of universal realization." He insists further that, "Anthropologists show their respect for human reason ... with a view to envisaging practical, progressive, rational ideals" A. Kroeber (quoted in), C. Bay, The Structure of Freedom (New York: Atheneum, 1962), p. 13. A similar attitude is expressed by anthropologists Kluckhohn, Hallowell and Linton, C. Bay, op. cit., p. 13.

14. The rational nature of man has been defended by psychotherapists. Mental health and rationality are frequently treated as synonymous, or at least concomitant factors. For example, Bay is a strong advocate of psychological freedom through rational insight, self-awareness, and mental health. C. Bay, op.cit., p. 13. Ellis suggests that the goal of rational psychotherapy is to get the client to, "... internalize a rational philosophy of living" A. Ellis, "Rational Psychotherapy and Individual Psychology," Journal of Individual Psychology, 19 (1958), p. 40. Alexander has examined the growing trend in psychotherapy of considering behavior to be rational. He concludes that, while the view is "... tempting and persuasive," he must

reluctantly make some objections to it. P. Alexander, "Rational Behavior and Psychoanalytic Explanation," Mind, 71 (1962), p. 326.

15. Psychology has been rather less concerned and impressed with man's rational capacities. Behaviorism, as developed by Watson, Hall and Tolman, advocated sophisticated forms of associationism as learning mechanisms. Their views lead to the "... rejection on metaphysical grounds of intention and awareness, ingredients of most views of rational action." Gestalt psychology, on the other hand, and the loosely derivative phenomenological and cognitive theories, are considerably more hospitable to the notion of human rationality." The Gestalt position, a minority voice in American psychology, has recognized and emphasized the phenomenon of intelligent thought and behavior." Smith contends that to understand the conditions and limitations of rational behavior, we should turn to such cognitive and functional psychologies as Bruber's. Smith concludes that trends have flowed "... in directions unsupportive of man's rational potentialities." M. Smith, "Rationality and Social process," Journal of Individual Psychology, 16 (1960, pp. 21-28.

16. R. Handy and P. Kurtz, op.cit., p. 11.

17. G. Homans, "Contemporary Theory in Sociology," in R. Faris (ed.), Handbook of Modern Sociology (Chicago: Rand McNally Co., 1964), p. 960.

18. F.S.C. Northrop, The Logic of the Sciences and the Humanities (New York: Meridian Books, 1959), p. 328.

19. R. Handy and P. Kurtz, op. cit., p. 11.

20. F.S.C. Northrop, op.cit., pp. 273-377.

21. L. Gross, "Values and Theory of Social Problems," in A. Gouldner and S. Miller, Applied Sociology (New York: The Free Press, 1965, pp. 366-387.

22. L. Gross, op.cit., p. 389.

23. G. Nettler, "Review of L.L. Whyte's 'The Next Development in Man,' 'Everyman Looks Forward,' 'Scientific Thought in the Coming Decades,'" Journal of Social Psychology, 31 (1950), pp. 157-161.

24. R. Rhees, "Social Engineering," Mind, 56 (1947), pp. 317-331.
25. L. Gross, op.cit., pp. 386-387.
26. H. Zetterberg, as cited in, P. Lazarsfeld, "Problems in Methodology," in R. Merton (ed.), Sociology Today (New York: Basic Books, 1959), p. 41.
27. L. Gross, op.cit., p. 387.
28. A. Kaplan, A. Skogstad and M. Girsbich, "The Prediction of Social and Technological Events," Political Opinion Quarterly, (1950), p. 93.
29. Ibid., p. 108.
30. R. Handy and P. Kurtz, op.cit., p. 50.
31. F.C. Northrop, op.cit., pp. 373-377.
32. A. Arendt, "Truth and Politics," The New Yorker, Feb. 25, (1967), pp. 49-88.
33. Ibid., p. 51.
34. C. Rothwell, "Forward," in D. Lerner (ed.), The Policy Sciences (Stanford: Stanford University Press, 1951), p. ix.
- 35.. Ibid., p. ix.
36. B. Barber, Science and the Social Order (New York: Collier Books, 1952).
37. D. Lerner (ed), The Policy Sciences, op.cit., p. 359.
38. R. Merton and D. Lerner, "Social Scientists and Research Policy," in D. Lerner (ed.), The Policy Sciences, op.cit., p. 296.
39. R. Merton and D. Lerner, "Social Scientists and Research Policy," op.cit., p. 294.
40. H. Becker, Outsiders (N.Y.: The Free Press, 1963), pp. 147 -164.

41. G. Nettler, "Ideology and Welfare Policy," Social Problems, 3 (1959), p. 208.

42. J. Conrad, Crime and Its Correction (Berkley, California: University of California Press, 1965), p.174.

43. H. Gold and F. Scarpitti, Combatting Social Problems (New York: Holt, Rinehart and Winston,1967),p.9.

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45. E. Glueck, "Principles of a Rational Penal Code," Harvard Law Review, 41 (1927), pp. 453-465.

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52. The Wolfenden Report, op.cit., pp. 12-15.

53. P. Devlin, op.cit., pp. 5-7.

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Review, 101 (1952), pp. 378-386.

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68. T. Szasz, Law, Liberty and Psychiatry (New York: MacMillan, 1963), pp. 91-122.
69. H. Bloch and G. Geis, Man, Crime and Society (New York: Random House, 1962), p. 32. R. Cavan, Criminology, 2nd ed., (New York: Thomas Y. Crowell, 1960) p. 297. E. Nagel, The Structure of Science (New York: Harcourt, Brace and World, 1961), pp. 12-13.
70. A. Kaplan, The Conduct of Inquiry (San Francisco: Chandler, 1964), pp. 373-377.
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72. H. Gold and F. Scarpitti, op.cit., p. 2.
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83. J. Toby, op.cit., p. 310.
84. H. Barnes and N. Teeters, op.cit., p. 338.
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100. M. Hakeem, "A Critique of the Psychiatric Approach to Crime and Corrections," Law and Contemporary Problems, 23 (1958), p. 882. Also see H. Schmidt and C. Fonda, "The Reliability of Psychiatric Diagnosis," Journal of Abnormal and Social Psychology, 52 (1956), pp. 262-267.

101. F. Kelly, "Research in Schizophrenia: Implications for Social Workers," Social Work (1965), p. 35.

102. Ibid., p. 36.

103. Ibid., p. 36. Similar findings are reported by: D. Bindura, "Psychotherapy and the Recovery from Psychoses," Journal of Abnormal and Social Psychology, 53 (1956), pp. 251-255. H. Brill and R. Patent, "Clinical-Statistical Analysis of Population Changes in New York State Mental Hospitals," American Journal of Psychiatry, 119 (1962), pp. 20-35. H. Eysenck, Handbook of Abnormal Psychology (New York: Basic Books, 1961), p. 713. C. Landis, "Statistical Evaluation of Psycho-Therapeutic Methods," in S. Hansid, Concepts and Problems of Psychotherapy (London: Heineman, 1938). T. Szasz., Law, Liberty and Psychiatry (New York: MacMillan, 1963), pp. 91-122.

104. A. Maslow, "The Expressive Component of Behaviour," Psychological Review, 59 (1949), pp. 261-272.

105. For example, Biesanz and Biesanz write: "Ethnocentrism is not altogether objectionable. It has certain definite advantages for the 'we group' and its individual members. It makes for social integration, reduces conflicts within the group (by deflecting many frustrations outward) and promotes cultural stability and uniformity. If what we do is right and natural and human, why change? In a nation at war, ethnocentrism is obviously an asset and is fostered by various means."

"Besides holding the group together, ethnocentrism is psychologically satisfying to the individual. The lowly substitute's ego is enhanced if he is a member of a championship team, however little he may personally have to do with the team's success. The barefoot Costa Rican coffee worker, riddled with intestinal parasites and weighted down by poverty, is proud, because he is taught that his country is the most advanced in Central America. A person participates vicariously in all sorts of wonderful things that other members of his group have or do." J. Biesanz

and M. Biesanz, Modern Society (Englewood Cliffs, New Jersey: Prentice-Hall, 1959), p.93.

106. W. Moore and M. Tumin, "Some Social Functions of Ignorance," American Sociological Review, 14 (1949), pp. 787-795. L. Schneider, "The Role of the Category of Ignorance in Sociological Theory," American Sociological Review, 27 (1962), pp. 492-507.

107. Consider, for example: "What I don't know can't hurt me;""Let sleeping dogs lie"; and "Where ignorance is bliss, 'tis folly to be wise."

108. W. Moore and M. Tumin, op.cit., p.785.

109. L. Schneider, op.cit., p. 496.

110. P. Sorokin, Social and Cultural Dynamics (New York: American Book Co., 1937), V.2, p.120.

111. W. Moore and M. Tumin, op.cit., p.791.

112. B. Malinowski, Magic, Science and Religion (Boston: Beacon Press, 1948).

113. L. Schneider, op.cit., p. 504.

114. S. Stryker, "Role-Taking Accuracy and Adjustment," Sociometry, 20 (1957), p. 296.

115. F. Davis, "Uncertainty in Medical Prognosis: Clinical and Functional," American Journal of Sociology, 66 (1960), pp. 41-47.

116. R. Merton, op.cit., p. 51.

117. B. Clark, "The Cooling-Out Function of Higher Education," American Journal of Sociology, 66 (1960), pp. 41-47.

118. Ibid., p. 505.

119. Ibid., p. 505.

120. Ibid., p. 505.

121. Ibid., p. 501.

122. R. Ross and E. van den Haag, The Fabric of

Society (New York: Harcourt, Brace and Co., 1957), p. 475.

123. For example, the rational search for the most appropriate means might lead incidentally to advanced knowledge which causes the actor to doubt the validity of the original goal. This phenomenon is frequently observed in sectarian religious groups (such as the Latter Day Saints) which encourage university education of their young people as a means of advancing the social status of the group. In so doing, they increase the possibility of young people gaining knowledge which leads them to doubt their religion, and often, to break with the sect, a process certainly dysfunctional for the sect and possibly also dysfunctional for the individual.

124. For example, an individual may consult a doctor in order to cure his illness. If he is told that his illness is incurable and nothing can be done, his "reason" for consulting the doctor may no longer be valid. If the knowledge of the serious nature of his illness causes him psychic distress (and possibly accelerates the illness), then the attempt to be rational has been for him dysfunctional.

125. J. Rousek, Social Control (Princeton, New Jersey: D. Van Nostrand Co., 1956), p. 11.

126. E.G. Argyris, Interpersonal Competence and Organizational Effectiveness (Illinois: Dorsey Press, 1962), p. 30.

127. G. Nettler, "A Note on the Notion of a 'Scientific' Morality," The Journal of Social Psychology, 32 (1950), p. 115.

128. G. Nettler, "Using Our Heads," Forthcoming, The American Sociologist, (1968).

129. K. Davis, Human Society (New York: The Macmillan Co., 1949), p. 133.

CHAPTER SIX

SUMMARY AND CONCLUSIONS

Rationality is an important concept in both sociology and the social sciences in general. As this examination shows, there is, however, disagreement as to how the term should be used. Chapter Two describes some of the definitions and connotations which are often implied by the term rationality.

One of the prerequisites of a science is the precise clarification of terms. As a step towards such a clarification of the term rationality, the following definition is offered:

By the phrase "rational act" we mean any act which meets the criteria specified by Pareto, that is, which is directed toward an empirical goal, consciously held, and in which the means to the goal are the most appropriate. The phrase 'most appropriate' applies to means which: 1) are chosen on the basis of information, and 2) which maximize the probability of the actor's achieving his goals.

... The term "rationality" refers to behavior that is composed of rational acts. The term is synonymous with the phrases, "rational action" and "rational conduct." For the sake of simplicity, all action which is not rational will be called "non-rational," in the tradition of Pareto and Levy.

By the infinitive "to be rational" we mean

"to perform rational acts." It is to be differentiated from the capacity to be rational and from the intention to be rational.(1)

The model of rational action is based upon four requirements:

- 1) that man is conscious of the end he desires
- 2) that the end he desires is empirical
- 3) that the ends are not mutually exclusive
- 4) that the actor is able to use an informational basis in the selection of the "most appropriate means," that he has access to the means and the "skills" required to implement them.(2)

The straightforward question "Is man rational?" is not answerable. We have noted that rationality is often assumed or advocated in both individual and group action. It has been argued, however, that there has been little evidence to support such an assumption or appeal. The rational model of man thus seems to be of limited application and often goes untested.

Formulations about man's rationality are frequently more within the province of normative theory involving how man should be, than within the province of non-normative theory involving how man actually behaves. Specifically, two kinds of implications are considered: first, observations about the impediments to rational action, and second, reflections on the implications of rationality for sociology and the policy sciences.

I. The Rationality Model

Even the most convinced proponent of the rationality of man would not assert that all men behave rationally all the time. There is no answer to the question of whether or not man is rational, but it is possible to describe factors contributing to rationality and non-rationality. In Chapter Three, four requirements of rational action were outlined. They are summarized as follows:

A. The Consciousness Requirement

To the extent that man is motivated by goals of which he is unaware, or performs actions of which he is not aware, rational action is impossible. Such behavior may be capricious, lacking a definite goal, expressive, or impulsive, and lacking reflective choice. That is, an unknown proportion of man's actions is non-rational.

B. The Empirical Requirement

To the extent that man's goals are vague, rational action is limited. Many of man's most precious goals are ambiguous -- such as his efforts to gain such states as salvation, peace, happiness, love, or emotional maturity.

In addition, to assume rationality is to require tests that allow for the determination of ends achieved or failed. In the public policy area in particular, criteria are frequently lacking to "tell us when we get there." Rational action thus remains questionable.

C. The Compatibility Requirement

To the extent that man's behavior is motivated by a multiplicity of goals, rational action is unlikely. Individuals and groups usually have a multiplicity of goals. Action can be rational only if the decision process vis-a-vis multiple goals is transitive -- that is, if values can be ordered in terms of their importance and utility thus maximized. Chapter Three shows that the evidence seems to indicate the greater probability of individuals achieving transitivity. Groups appear to generate intransititvity, and the "superiority" of group solutions to problems is only a statistical artifact.

D. The Informational Requirement

To the extent that an actor has inadequate information regarding what, in the light of the "most extensive knowledge," is the "most appropriate" means for the achievement of his goal, rational action is impossible.

Examination of the informational requirements illustrates the difficulty of applying the model of rationality to the behavior of men. Some of the many factors involved include the following:

1. "Most extensive knowledge" is impossible

Only a few scientists are able to state with certainty what the "most appropriate" means for the solution of the problem or the achievement of a goal are. Such scientists might be capable of rational action in one area, but it is quite certain they would not be privy to such information in all aspects of their life.

2. "Most appropriate means" assumes transitivity

A means is "most appropriate" if it is effective in the light of the most extensive knowledge. As was shown regarding the compatibility requirement, the degree to which decisions are characterized by transitivity is unknown.

3. "Most appropriate means" assumes knowledge of consequences

In order to evaluate the appropriateness of using means for the attainment of one end, it is first

necessary to know the consequences of that means for other ends -- a fact which cannot always be anticipated. Rational action may in fact prove to be non-rational, when considered later in the light of its consequences.(3)

4. "Appropriate means" must be available

Definitions of rationality imply that the knowledge of appropriate means will result in their use, but appropriate means may not exist, or the actor may not have access to them, nor the skill to implement them, regardless of his knowledge of them or his desire to use them. Merton has emphasized this point in his discussion of types of deviant behavior. Zollschan and Gibeau suggest that alienation might be considered a consequence of the unavailability of means for the attainment of goals.(4) The problem of "skills" necessary for the implementation of means has not been elaborated.

The conclusion regarding the four requirements of rationality is that, although rationality is not impossible, the model as a description of behavior lacks empirical support and has frequently been used as an honorific.

II. Rationality and Normative Theory

It is possible to designate at least two main concepts relevant to man's behavior: the normative, which is ethical and/or instrumental and used to specify how man should be; and the non-normative, which is descriptive and employed to specify how man "is." The clarity of a concept is reduced if its use is not explicit. Such confusion has surrounded the use of the concept of rationality. If a social scientist assumes that man acts rationally, he is required to cite empirical evidence. If a social scientist asserts that man should be rational, he is making statements outside the boundaries of science, where the authority of a scientist qua scientist is no better than anyone else's. Unfortunately, the spelling out of such problems does not prevent social scientists from continuing to make such statements. They are especially prevalent throughout the policy sciences, and often reflect unsupported and ideological positions. The conclusion of the present discussion is not that the use of the concept of rationality should be abandoned, but rather to be useful, it should be used in a different way.

If the policy sciences are to be justly called scientific, they must restrict their endeavors to the realm of the empirically demonstrable. They cannot specify the

goals of society (although they may be able to describe them). Their proper function is to indicate the "most appropriate means" for the attainment of a given goal.

Rock comments:

The policy-makers' task is to choose among competing alternatives. The function of research is to provide him with a rational basis for his choices, within the broadest framework of information, analysis and theory. (5)

Such "information, analysis and theory" should provide the policy maker with an objective description of a particular issue or problem. If such a theory assumes that man is rational, then it is not "good" description unless it is supported by empirical evidence. If it assumes that man should be rational, then it is not description at all, but prescription. It is suggested, however, that the concept of rationality may be used in a third way which takes it out of the realm of ethical normative theory and which renders it acceptable and useful in social and policy science. It is suggested that the concept of rationality be considered an ideal type.

In the formulation of an ideal type, the definition of rationality which has been proposed could be used, not as a description of man's behavior, but as an abstract

construction which is,

... a purposive, planned selection, abstraction, combination, and accentuation of a set of criteria that have empirical referents, and that serves as a basis for comparison with empirical cases. (6)

It need hardly be said that, in this context, the word "Ideal" loses any evaluative connotation. This use of "ideal" is instrumental.

As the concept of rationality is presently used, it is often limited as a scientific (i.e. descriptive) term, because we have no measure of the extent to which it characterizes man's behavior. Since perfect rationality seems unlikely, almost all action must be collectively considered non-rational. While this is acceptable, in that it involves description rather than evaluation, it is not useful, for it fails to tell us much about human behavior. If, however, rationality is considered an ideal type, it may be possible to characterize men or groups as more or less rational, and equally meaningful to formulate behavioral hypotheses and predictions on the basis of such characterizations. For example:

... it makes sense to talk about the 'economic man' despite the fact it is doubtful that

the 'rationality' imputed to him is the most common form of economic behaviour. It is through the notion of rationality as the outstandingly representative form, that the non-rational forms of economic behaviour are then apprehended.(7)

III. Rationality as a Value

Rationality is often considered desirable. As Myrdal notes: "In our civilization, people want to be rational and objective in their beliefs. We have faith in science and are, in principle, prepared to change our beliefs according to its results."(8)

Such values have sometimes led to a condemnation of the non-rational; conversely, the positive evaluation of rationality and its consequences have been associated with conceptions of social progress, and with the optimistic assertion that "science can save us." The principal vehicles of such salvation have been the policy sciences, which some theorists have assumed could indicate both the desirable goals and the most efficient means.

Although the foregoing summary of rationality as a value is admittedly oversimplified, it does serve to illustrate two points. First, in our consideration of the desirability of rationality, it is important not to endorse the attractive fallacies that "evil causes evil"

and "good causes good." Although it is readily agreed that "good" in the form of rationality has led to many "good" consequences, it does not logically follow that it does so because it is good, any more than it logically follows that because non-rationality is assumed to be "evil," the consequences of it must necessarily also be "evil." As was illustrated in Chapter Five, rationality can be "undesirable" and non-rationality, "desirable." It is a mistake to exaggerate the value of rationality to the point where it becomes a panacea.

Second, if the policy sciences are to contribute effectively to the solution of problems, they might best accomplish this by remaining scientific -- that is, by remaining descriptive.(9)

The concept of rationality is not useful either to the social sciences or to the policy sciences if it is used as an unsupported descriptive term, or as a prescriptive term, a function beyond the pale of science. If, however, rationality is used as an ideal type, it can become a device against which man's behavior can be effectively measured. For example, it would be possible to assess particular policies for rationality. The policy could be tested for: a) the amount of information used in deciding

it, and b) the extent to which policy makers made efforts to test for the consequences of their policy. The appeals to rationality in public action seem frequent, yet there do not appear to be many policy makers who are interested in fulfilling the requirements of rational action by testing to see if their goals have been achieved, and with what consequences. The goals to which they address their endeavors should be clearly specified in such a way that they are empirically testable. Predictive indices might also develop and be made available for general use.(10)

IV. Conclusions

Although rational action is not impossible, it is descriptive of a limited sphere of human behavior. It has restricted use as a description of how man behaves. However, the ideas implied in the concept of rationality are important for the study of man, and the concept is an effective tool for social science if it is considered an ideal type, rather than a description or prescription.

Rationality is valued in our society. Oakeshott has suggested that the reason rationality is considered so attractive and laudable, is that it combines man's passionate desire for certainty, about matters of conduct and belief, with the conviction that such certainty is possible.(11) We

do know that men often think their own actions are rational, and that when the expected association of means and ends is not forthcoming, the results are many. The subjective certainty that one is behaving rationally is often reassuring and satisfying, and is associated with the positive evaluation of rational action. It has been said that, "Free will is an illusion that we must accept as reality." This epigram might be rephrased: "Rationality is an illusion that we must accept as reality."

FOOTNOTES: CHAPTER SIX

1. This section recapitulates points in Chapter Four, pp. 104-109. The last point of this definition has been the cause for a great deal of confusion in debates as to whether or not man is rational. If a theorist considers action from the subjective viewpoint of the actor he finds, as Pareto and others have pointed out, that essentially all action either appears to be rational to the actor, or was intended to be rational by the actor. From this perspective, the question of the rationality of man must be answered in the affirmative. If, however, the theorist considers action from the objective viewpoint outlined in this thesis, he must consider rationality 'in the light of the most extensive knowledge,' and we find that generally speaking men do not act rationally, regardless of their perceptions or intentions.

2. This section summarizes portions of Chapter Three, pages 68-85.

3. Simon has summarized his objection to objective rationality as follows:

- 1) Rationality requires a complete knowledge and anticipation of the consequences what will follow on each choice. In fact, knowledge of consequences is always fragmentary.
- 2) Since these consequences lie in the future, imagination must supply the lack of experienced feeling in attaching value to them. But values can only be imperfectly anticipated.
- 3) Rationality requires a choice among all possible alternative behaviors. In actual behavior, only a very few of all these possible alternatives come to mind.

D. Taylor, "Decision Making and Problem Solving," in J. March (ed.), Handbook of Organizations (Chicago: Rand McNally and Co., 1965), p. 60.

4. Zollschan and Gibeau have re-interpreted Seeman's types of alienation in terms of the means-ends schema and rationality. Powerlessness is defined in terms of the achievability of ends, and occurs when the desired ends are not achievable. Meaninglessness is defined in terms of the predictability of ends, and occurs when the desired ends cannot be predicted, but where action is still undertaken to achieve them. Normlessness is defined in terms of the means-ends schema, and occurs when legitimate means are not available for the achievement of ends or, if they are available, they are not effective. Isolation is defined in terms of ends which are desired but which are unsharable. It occurs when the goals sought by the actor are not common to the group or society of which he is a part. Self-estrangement is defined in terms of the compatibility of ends. It occurs when at least two ends are in conflict, and is a possible result of situations where the ends towards

two ends are in conflict, and is a possible result of situations where the ends towards which action is directed are intermediate ones, and are not directly desired in themselves. G. Zollschan and P. Gibeau, "Concerning Alienation: A System of Categories for the Exploration of Rational and Irrational Behavior," in G. Zollschan and W. Hirsch (eds.), Explorations in Social Change (New York: Houghton Mifflin Co., 1964), pp. 154-155.

5. V. Rock, "The Policy Maker and the Social Sciences," in D. Learner (ed.), The Policy Sciences (Stanford: Stanford University Press, 1961), p. 368.

6. J. Dohy (ed.), An Introduction to Social Research (Harrisburg, Pennsylvania: The Stackpole Company, 1954), p. 147.

7. Ibid., p. 147.

8. G. Myrdal, An American Dilemma: The Negro Problem and Modern Democracy (New York: Harper and Brothers, 1944), p. 1027.

9. See, for example, Wootton's discussion of how the 'goals' of mental health constitute: "... the personal judgment of their authors, rather than scientifically established facts" B. Wootton, Social Science and Social Pathology (London: George Allen and Unwin, 1959), p. 216.

10. For example, Wootton has noted a non-rational aspect in criminology, where although predictive instruments have been shown to be superior to clinical judgments, there is a great reluctance to use these "most effective" means. Ibid., pp. 198-199.

11. M. Oakeshott, Rationalism in Politics and Other Essays (London: Methuen and Co., 1962), p. 93.

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APPENDIX A

SELECTED DEFINITIONS OF THE TERM 'RATIONALITY'

G. Allport "... irrationality in psychological literature denotes domination of choice by affective mechanisms (emotion, drive, instinct, impulse) rather than by intellective mechanisms."

(Allport, Handbook of Social Psychology,
15-18)

A. Ayer "... 'being rational' entails being guided in a particular way by past experience."

(Blanshard, Reason and Analysis, 25)

W. Bartley "I shall use 'intellectualism' to designate the movement of seventeenth-century rationalism, represented by philosophers, such as Descartes and Spinoza, and reserve the words 'reason,' 'rationality,' and 'rationalism' to refer broadly to that tradition whose members are dedicated to learning more through critical discussion."

(Bunge, The Critical Approach to Science and Philosophy, 3)

R. Dahl and
B. Lindblom "An action is rational to the extent that it is 'correctly' designed to maximize goal achievement, given the goal in question and the real world as it exists."

(Dahl and Lindblom, Politics, Economics and Welfare, 38)

H. Feigl "the procedure of induction ..., far from being irrational, defines the very essence of rationality."

(Blanshard, Reason and Analysis, 25)

J. Gould and
W. Kolb

"In a broad sense, rationality denotes a style of behavior that is appropriate to the achievement of given goals, within the limits imposed by given conditions and constraints."

"Rationality sometimes refers to processes of choice that employ the intellective faculty: sometimes to the choices themselves. The former emphasis is typical of earlier usage in psychology, logic, and ethics; the latter emphasis predominated in economics and sociology."

"Because of the historical identification of rationality with the doctrine of rationalism, recent psychological writing tends to prefer terms like cognitive process ... or intellective process. Hence, rationality in reference to the process of choice seems to be disappearing from social science literature."

"Economists have generally used rationality to denote an attribute of an action selected by a choice process, rather than an attribute of the process."

(Gould and Kolb, Dictionary of the Social Sciences, 573-574)

E. Hegel

"The real is rational and the rational real."
(Jones, A History of Western Philosophy, 44)

W. James

"(Rationality is) synonymous with "The peculiar thinking process called 'reasoning.' In this view, the rationality of a choice depends upon the process of making it."

(Gould and Kolb, Dictionary of the Social Sciences, 574)

M. Levy

"Logical (or rational) action is that action in which the objective and subjective ends of action are identical. That is to say, it is action in which

the end that the actor seeks to achieve by the means he has chosen is identical with the end that a qualified scientific observer (with, theoretically, perfect scientific knowledge) knows that the actor will achieve. In such action as this both the means and the ends must be empirical."

(Levy, The Structure of Society, 242)

L. Lewis and
J. Lopreato

"... arational behavior (is defined) as single-ended action in which, from a scientific point of view, means are totally inappropriate for an intended end."

(Lewis and Lopreato, "Arationality, Ignorance and the Perceived Danger in Medical Practices," American Sociological Review, 27 (1962), 503.

K. Mannheim

"We understand as substantially rational an act of thought which reveals intelligent insight into the inter-relations of events in a given situation. Thus the intelligent act of thought itself will be described as 'substantially rational' whereas everything else which either is false or not an act of thought at all (as for example drives, impulses, wishes, and feelings, both conscious and unconscious) will be called 'substantially irrational.'"

(Mannheim, K., Man and Society in an Age of Reconstruction, 53)

V. Pareto

"Since social phenomena are always complex, Pareto says it is helpful to divide them into at least two elements distinguishing logical from non-logical conduct. Human conduct is logical only under certain definite and limited conditions:

1. The action must be motivated by a conscious goal.
2. The goal must be a humanly possible one.
3. The means taken towards reaching the goal must be the most appropriate and suitable means.

Should one of these conditions be missing, the conduct concerned is nonlogical."

(Bailey, Sociology Faces Pessimism,
74)

T. Parsons

"The postulate of rationality occupies a somewhat curious status in the theory of action. It is a clear implication of the theory of action on both the personality and the social system levels, that 'rational action' is a type which presupposes a certain mode of the organization of all the elements of action ... On the personality level ... rational action is a type which exists within certain limits of the organization of personality. On the social system level, correspondingly, there is scope for rational adjustments within certain limits imposed by the institutionalized role-system.

Three levels of the organization of rational action in action systems may be distinguished. The first of these, the most elementary, is that involving the mobilization of resources for the attainment of a single given goal, by an individual action or collectivity. This is essentially what, in the Structure of Social Action, was called a 'technology,' the analysis of the patternings of action relative to such a single given goal. Technology always involves two aspects or sets of factors, those pertaining to the conditions of success, and those concerning the 'cost,' which is ultimately the sacrifice of alternative goals involved in the expenditure of resources for the one in question. 'Efficiency' is the measure of the effectiveness of a technological process relative to its cost.

The second level of organization introduces considerations of 'economy,' which consists in the process of the allocation of resources relative to a plurality of alternative goals....

The third level of organization of rational action is concerned not with economy but with the maximization of power in the political sense."

(Parsons, The Social System, 549-550)

F. Rickert

"... (Rickert's) theorem concerning the 'rationality' (intelligibility) and 'irrationality' (unintelligibility) of empirical reality ... one must proceed by remoulding ... the phenomena (of reality), which is to say simplifying them and transforming the heterogeneous continuum of reality into either a homogeneous continuum or a heterogeneous discretum and thus making it 'rational' from an epistemological viewpoint."

(Kolegar, "The Concept of 'Rationalization' and Cultural Pessimism in Max Weber's Sociology," The Sociological Quarterly, 5 (1964), 359.

R. Ross and
E. van den
Haag

"Rationality is logical consistency, lack of contradiction."

(Ross and van den Haag, The Fabric of Society, 196).

M. Weber

"... a careful examination of Weber's use of the term 'rationality' does indicate, in the main, what constitutes the sphere of rationality, namely, systematic ordering ("according to a plan") and methodological attainment of a definitely given end by calculation of adequate means.

(Kolegar, "The Concept of 'Rationalization' and Cultural Pessimism in Max Weber's Sociology," The Sociological Quarterly, 5 (1964), 361)

M. Weber

" ... In the writing of Weber (The Theory of Social and Economic Organization) ... in the ideal type of 'rational legal authority,' rationality means the conscious adaptation of the organization to goals, and its operation through the impersonal application of rules without deflection by the personal goals of the functionaries. An approximate synonym is Mannheim's phrase, functional rationality."

(Gould and Kolb: A Dictionary of the Social Sciences, 574)

APPENDIX B

SELECTED DEFINITIONS OF THE TERM RATIONALIZATION

G. Allport

"Reason fits one's impulses and beliefs to the world of reality; rationalization fits one's conception of reality to one's impulses and beliefs."

(Gould and Kolb, Dictionary of the Social Sciences, 578)

H. Garfinkel

"Selecting, arranging and unifying the historical context of an action after its occurrence so as to present a publically acceptable or coherent account of it is a familiar meaning of rationalization."

(Garfinkle, "The Rational Properties of Scientific and Common Sense Activities," in N. Washburne, Decisions, Values, and Groups, 308)

J. Gould and
W. Lokb

"Rationalization denotes: (a) the activity of making something reasonable, intelligible, simple; and/or the result(s) of such activity."

"The most general sense of this term (rationalization) is the act of making rational or intelligible; in a somewhat narrower usage in psychological and psychoanalytical writings it denotes the process of devising reasons for acts and ideas which have their origin in motives which the rationalizer seeks to conceal from himself and others."

"Sociologists, especially in Germany, have sometimes conceived of this process (of rationalization) as part of a wider process -- that of the more general acceptance of certain standards and/or methods deemed rational. For such writers, the term implies emphasis upon, or increased recourse to, the methods which reputedly characterize the activities of e.g. (a) economic theorists; (b) accountants,

bookkeepers and those concerned with, in general, the calculation of quantities -- more especially economic quantities; (c) applies science. Thus Weber argues that 'In the last resort the factor which produced capitalism is the rational permanent enterprise, rational accounting, rational technology, and rational law, but, again, not these alone ...'"

(Gould and Kolb, Dictionary of the Social Sciences, 574-576)

E. Jones

Rationalization is: "the inventing of a reason for an attitude or action the motive of which is not recognized."

(Gould and Kolb, Dictionary of the Social Sciences, 575)

J. Rousek

"The strain toward orderliness in both society and the individual ... gives to man a definite urge, reasonably to justify both his attitudes and behavior. This process is designed to demonstrate to others and himself his consistency. His justifications may not be the real reasons; but they are the reasons he uses even though more realistic ones have to be disregarded. This we call rationalization."

Rousek, Social Control, 43)

APPENDIX C

SELECTED DEFINITIONS OF THE TERM 'REASON'

G. Allport

"Reason fits one's impulses and beliefs to the world of reality; rationalization fits one's conception of reality to one's impulses and beliefs."

"Reason may be defined as one's capacity to shape one's belief and conduct to accord with one's knowledge of the world, and if one's knowledge is insufficient, the capacity to set out to acquire more knowledge pertinent to the issue at hand."

(Gould and Kolb, Dictionary of the Social Sciences, 578)

B. Blanshard

"Reason ... for the philosopher ... commonly denotes the faculty and function of grasping necessary connections."

(Blanshard, Reason and Analysis, 25)

W. Coutu

"In the present setting reasoning is not a type of activity different from thinking; it is merely more restricted by some logic or conceptual system and therefore more controlled by the structure of that system and therefore more accurate.

(Gould and Kolb, A Dictionary of the Social Sciences, 578)

J. Dewey

"'Reason' as a noun signifies the happy co-operation of a multitude of dispositions, such as sympathy, curiosity, exploration, experimentation, frankness, pursuit -- to follow things through -- circumspection, to look about at the context, etc., etc."

(Gould and Kolb, A Dictionary of the Social Sciences, 578)

D. Emmet

"Reason ... will be looked on not as some kind of pure faculty, but as attempts on the part of human beings to use and improve their tools of concepts and language so as to make logical connections and to advance knowledge."

(Gould and Kolb, Dictionary of the Social Sciences, 578)

J. Gould and
W. Kolb

"From the strict usage, denoting the activity of ratio-cination or logical deduction of necessary truth, the term reason has come to denote, more generally, the power of intellect to formulate concepts and establish logical relations in such a way as to draw a correct conclusion from a given premise or to make an objectively valid judgement about empirical phenomena. By extension it has also come to mean a logical and valid explanation or justification for an event or relationship; and by still further extension any cause or motive."

(Right reason in European political thought down to the 18th century) "...was a special intuitive faculty possessed by human beings as distinct from other animals, which enabled them directly to apprehend universal truths or principles which governed the workings of a universe considered to be rational."

"Reason, in this sense (contrasted with passion), when embodied in human character produces the man of sagacity and prudence as distinct from the man who is 'passion's slave.' Reason in this context carries a strong suggestion of freedom from bias, consistency, uniform application of rules, and the absence of doctrinaire or fanatical adherence to rules regardless of circumstance."

"Other writers, either explicitly or implicitly distinguish between mere reflective thinking, which may be random and seemingly without definite purpose, and reason as the capacity to think logically and purposefully.

Trends to avoid the term reason: "... have

not eliminated the need for some term to denote the purposeful activity of regulating means and ends in a way characteristic of human beings."

"Reason is related intimately to logic by most writers. In addition to being used in the sense of capacity to think logically, reason denotes logical and sound explanations for situations ..."

"Reason (in the sense of what we do when we employ reason) would embrace a number of methods of procedure in seeking the truth concerning empirical phenomena. It would be concerned with such techniques as observing, measuring, comparing, experimenting, formulating hypotheses, verifying, formulation of concepts, logical analysis of meanings and linguistic grammar.

(Gould and Kolb, A Dictionary of the Social Sciences, 577-578)

L. Hobhouse

"Reason is ... that which requires proofs for assertions, causes for effects, purposes for action, principles for conduct, or, to put it generally, thinks in terms of grounds or consequences."

(Blanshard, Reason and Analysis, 25)

W. James

"(Rationality is) synonymous with 'The peculiar thinking process called reasoning.' In this view, the rationality of a choice depends upon the process of making it."

(Gould and Kolb, A Dictionary of the Social Sciences, 574)

W. Jones

"Rationalism ... the conviction ... that reason is a more reliable instrument than sense-perception."

(Jones, A History of Western Philosophy, 44)

J. Randall
and
J. Buchler

"The term 'reason' may be interpreted in at least three senses. (1) One of these is illustrated by the contrast sometimes made, as in medieval philosophy, between 'faith and reason.' Here, 'reason' is intended to signify merely the use of the mental powers, or speculation, as distinguished from passive acceptance of belief on faith or authority. In this sense there is no implication that reason is superior or inferior to faith. (2) In the second sense 'reason' means the free and exclusive exercise of the intelligence in inquiry. It is intended as synonymous with 'reasonableness' or the most judicious employment of the conscious faculties. The use of 'reason' in this sense does imply an activity superior to any other. It is meant to be contrasted with barbarism, prejudice, emotion, or whatever blindness characterized faith and authority ... In the second meaning, to employ reason is to be 'rational.' 'Rational,' in any event, is obviously not the same as 'rationalistic.' (3) A third and narrower sense of 'reason' is the one employed ... to denote the rationalistic emphasis. Here 'reason' implies a faculty independent of, or opposed to, or otherwise contrasted with, experience or observation.

(Randall and Buchler, Philosophy: An Introduction, 83-84)

"Those philosophers who stress reasoning or thought as the fundamental factor in knowledge have come to be known in modern times as rationalists ..."

(Randall and Buchler, Philosophy: An Introduction, 74)

R. Ross and
E.van der
Haag

"... the property of judging aright and of distinguishing Truth from Error, which is properly called Good Sense or Reason ..."

(Ross and van der Haag, The Fabric of Society, 660)

T. Whittaker

"Reason is ... the relational element in intelligence, in distinction from the element of content, sensational or emotional ... both the Greek term and the Latin ratio, from which 'reason' has largely drawn its meaning, were sometimes used to denote simply 'relation' or 'order.'"

(Blanshard, Reason and Analysis, 25)

APPENDIX D

SELECTED DEFINITIONS OF THE TERM 'REASONABLENESS'

R. Ross and
E. van der
Haag

"Rationality is logical consistency, lack of contradiction. It is to be distinguished from reasonableness, the quality of the mind open to arguments and evidence opposed to its beliefs: a willingness to reconsider."

(Ross and van der Haag, The Fabric of Society, 196)

L. von Mises

"Presumably the reader knows what he would regard as a reasonable or judicious attitude in most situations of life. No doubt a major component of such an attitude is, in the first place, to judge on the grounds of experience, that is, the remembrance of the contingencies of one's own life and the knowledge of those of others. Furthermore, such an attitude requires a continual readiness to give up a judgement once made or to change it if new experiences require. It also implies a lack of prejudice, superstition, obstinacy, blind trust in authority, mystical thinking, fanaticism. Evidently, nobody can be a perfect embodiment of all these qualities all of the time; but one should certainly be ready to repudiate actions and judgements as soon as one becomes aware that they are not consistent with those requirements."

(von Mises, Positivism: A Study in Human Understanding, 1)

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